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(U.S.) Geological Survey, Columbus, OH Water Resources Div

Aug 79

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Water Resources Data for Ohio

Volume 1. Ohio River Basin

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OH-78-1

WATER YEAR 1978

Prepared in cooperation with the State of Ohio and with other agencies

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SPRINGFIELD, VA. 22161

CALENDAR FOR WATER YEAR 1978

1977

OCTOBER

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1978

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SEPTEMBER

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15. Supplementary Notes

Prepared in cooperation with the State of Ohio and with other agencies.

16. Abstracts

Water resources data for the 1978 water year for Ohio consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground-water wells. This report in two volumes contains records for water discharge at 168 gaging stations; stage and contents at 32 lakes and reservoirs; water quality at 58 gaging stations and 54 wells; and water levels at 39 observation wells. Also included are data for 60 crest-stage partial-record stations and 36 low-flow partial-record stations. Additional water data water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Ohio.

17. Key Words and Document Analysis. 17a. Descriptors

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17b. Identifiers/Open-Ended Terms

17c. COSATI Field/Group

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PREFACE

This report was prepared by personnel of the Ohio district of the Water Resources Division of the U.S. Geological Survey under the supervision of D.E. Click, District Chief, and J.E. Biesecker, Regional Hydrologist, Northeastern Region. It was done in cooperation with the State of Ohio and with other agencies.

This report is one of a series issued by State. General direction for the series is by J.S. Cragwall, Jr., Chief Hydrologist, U.S. Geological Survey, and P. Cohen, Assistant Chief Hydrologist for Scientific Publications and Data Management.

Data for Ohio are in two volumes as follows:

Volume 1. Ohio River basin
Volume 2. St. Lawrence River basin

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UNITED STATES DEPARTMENT OF THE INTERIOR

CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY

H. W. Menard, Director

For information on the water program in Ohio write to
District Chief, Water Resources Division
U.S. Geological Survey
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Columbus, Ohio 43212

1979

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(Letter after station location designates type of data: (c) chemical, (l) water level.)

Well number	Local number	Location	Page
		ATHENS COUNTY	
391934082065000	AT-10	Athens (c)	301
392004082071600	AT-2A	Athens (lc)	302
		AUGLAIZE COUNTY	
403233083574500	AU-3	Southwest of New Hampshire (lc)	303
		BELMONT COUNTY	
400619080423200	B-1	Martins Ferry (lc)	304
		BUTLER COUNTY	
391805084261800	BU-9	Northwest of Sharonville (lc)	305
392021084340300	BU-56	Fairfield (lc)	306
392445084333000	BU-36	Hamilton (c)	307
392515084322000	BU-5	North of Hamilton (lc)	308
393202084241500	BU-15	Middletown (lc)	309
		CLARK COUNTY	
395835083491700	CL-20	North of Springfield (c)	310
		CLERMONT COUNTY	
385144084133900	CT-2	Moscow (lc)	311
		COSHOCTON COUNTY	
401735081523800	CS-2	Northwest of Coshocton (lc)	312
		FAIRFIELD COUNTY	
394544082271000	F-1	West Rushville (lc)	313
		FRANKLIN COUNTY	
395118082573300	FR-3	Southwest of Reese (lc)	314
395157083003500	FR-109	South of Columbus (lc)	315
		GALLIA COUNTY	
385538082103300	G-2	East of Crown City (lc)	316
		HAMILTON COUNTY	
390645084440500	H-21	South of Elizabethtown (c)	317
390653084485700	H-5	South of Elizabethtown (lc)	318
391039084291500	H-11	Cincinnati (lc)	319
391324084272500	H-9	Cincinnati (lc)	320
391634084152600	H-22	Loveland (c)	321
391748084393800	H-19	Southwest of Venice (c)	322
391817084393300	H-4	Southwest of Ross (lc)	323
		JEFFERSON COUNTY	
401853080361100	JE-10	Wingo Junction (c)	324
		MADISON COUNTY	
395740083255700	M-3	North of London (lc)	325
		MAHONING COUNTY	
410042080453800	MA-1	South of Canfield (lc)	326
		MARION COUNTY	
403413083170500	MN-4	Southeast of New Bloomington (lc)	327
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			Page
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393325082571100	PK-21	South of Circleville (c)	334
393327082571600	PK-7	South of Circleville (lc)	335
		PIKE COUNTY	
390359083015100	PI-2	West of Piketon (lc)	336
		PORTAGE COUNTY	
411101081022000	PO-3	East of Ravenna (lc)	337
		ROSS COUNTY	
391922082580000	RO-3	Chillicothe (lc)	338
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38845108256190 0	SC-1	New Boston (lc)	339
		STARK COUNTY	
405052081193700	ST-4	Northeast of Canton (lc)	340
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403207081293800	TU-3	Dover (lc)	341
403210081293000	TU-10	Dover (c)	342
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401826083255200	U-4	Southeast of Raymond (lc)	343
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392511084182500	W-14	East of Monroe (lc)	344
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392438081271100	WA-1	Marietta (lc)	345
392556081281500	WA-10	Marietta (c)	346

WATER RESOURCES DATA FOR OHIO, 1978

INTRODUCTION

Water resources data for the 1978 water year for Ohio consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground water. This report, in two volumes, contains discharge records for 166 gaging stations; stage and contents for 32 lakes and reservoirs; water quality for 50 gaging stations, and 54 wells; and water levels for 39 observation wells. Also included are 59 crest-stage partial-record stations and 35 low-flow partial-record stations. Additional water data were collected at various sites, not involved in the systematic data collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Ohio.

Records of discharge or stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled "Ground-Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, Va. 22202.

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released either in separate reports or in conjunction with streamflow records. Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published as an official Survey report on a State-boundary basis. These official Survey reports carry an identification number consisting of the two letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report OH-78-1." Water-Data reports are for sale by the National Technical Information Service, U.S. Department of Commerce, Springfield, Va. 22161.

COOPERATION

The U.S. Geological Survey and organizations of the State of Ohio have had cooperative agreements for the systematic collection of streamflow records since 1898, for ground-water levels since 1936, and for water-quality records since 1946. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

Ohio Department of Natural Resources, R.W. Teater, director, through Division of Water, W.S. Nichols, chief.

Ohio Environmental Protection Agency, J.F. McAvoy, director, through Division of Surveillance and Laboratory Services, Gary Martin, chief.

Ohio Department of Transportation, D.L. Weir, director, through Division of Highway, L.R. Talbert, engineer for research and development.

Miami Conservancy District, L.B. Coy, general manager and secretary.

Three Rivers Watershed District, G.H. Watkins, secretary-treasurer.

City of Columbus Department of Public Service, R.C. Parkinson, director, through Division of Water, Jack Holt, superintendent.

City of Canton Water Department, J.D. Williams, superintendent.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army in collecting records for 146 hydrologic-data stations in this report, and by the Environmental Protection Agency for 8 stations.

Organizations that supplied data are acknowledged in station descriptions.

HYDROLOGIC CONDITIONS

At the start of the 1978 water year, streamflow was normal in the northwest and excessive in the remainder of the State. Above normal precipitation during the fall months increased streamflow until all index stations were reporting runoff well above average. Minor flooding resulted from rain and snow melt throughout the State December 18-21.

Runoff remained near normal during January, except in the eastern portion where it was excessive for the seventh consecutive month. Severe winter conditions resulted in deficient runoff during February, except in the east where it was normal.

Rain and snow melt caused minor flooding throughout the State during March. Heavy rain and snow melt in Indiana and Michigan caused minor flooding in northwest Ohio on March 22-24. This produced a peak of record on the Maumee River at Waterville.

Streamflow was normal for April except in the northwest where it was excessive. Moderate precipitation resulted in normal runoff throughout the State during May and June except in the east where it was excessive. A local rain in excess of seven inches on June 17-18 caused a flash flood with minor property damage in Perry County.

During July excessive runoff occurred in east and northwest Ohio and was normal elsewhere. Streamflow for August was normal in the northwest and central portions of the State and excessive in the southwest and eastern areas. Increased precipitation resulted in excessive runoff in all but northwestern Ohio at the close of the water year.

Ground-water levels in general reflected seasonal changes during the first quarter of the water year. The last three quarters reflected higher than normal conditions with the northeastern area recording a record high at the end of December and during January.

NOTICE

During water year 1978, revisions were made in the terminology used to define 139 of the water-quality parameter codes that have been used by the Geological Survey in its publication of water-quality data and in its WATSTORE data system. These revisions were made to achieve consistency in terminology and to conform to a joint USGS-EPA agreement on terminology. They do not represent a change in the way the codes have been used in the past or in the association of specific code numbers with identified analytical procedures.

Use of the new terminology began with data for the 1978 water year, and therefore, it first appears in this publication. Definitions on which the terminology is based are included in the "Definitions" section of this report, and a table showing both old and new terminology is attached as an appendix to the report.

DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined below. See also the table for converting English units to International System of units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer, tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as the organisms which produce colonies within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 1.0°C on M-enterrococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the unconsolidated material of which a streambed, lake, pond, Bed material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2).

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 cubic meters.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common pigments in plants.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (FT^3/s, ft^3/s, cfs) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved.--That material in a representative water sample which passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Drainage area of a stream at a specific location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the river above the specified point. Figures of drainage area given herein include all closed basins, or noncontribution area, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface stream and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO$).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per gram (UG/G, ug/g) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (gram) of sediment.

Microgram per kilogram (UG/KG, ug/kg) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (kilogram) of bottom material.

Micrograms per liter (UG/L, ug/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L, and is based on the mass of sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meters (m^2), acres, or hectares. Periphyton benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliters (mL) or liters (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle-size is the diameter, in millimeters (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology.

The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay.....	0.00024 - 0.004	Sedimentation.
Silt.....	.004 - .062	Sedimentation.
Sand.....	.062 - 2.0	Sedimentation or sieve.
Gravel.....	2.0 - 64.0	Sieve.

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, number, mass or volume.

Periphyton is the assemblage of microorganisms attached to and growing upon solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Recoverable from bottom material.--The amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Runoff in inches (IN, in) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that passes a section in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Suspended-sediment load is the quantity of suspended sediment passing a section in a specified period.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in micromhos per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of the total concentration in a water-sediment mixture. The water-sediment mixture is associated with (or sorbed on) that material retained on a 0.45-micrometer filter.

Suspended, recoverable.--The amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total.--The total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per day is the quantity of substance in solution or suspension that passes a stream section during a 24-hour day.

Total.--The total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the ananalytical method determines all of the constituent in the sample.)

Total in bottom material.--The total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

Total load (tons) is the total quantity of any individual constituent, as measured by dry mass or volume, that is dissolved in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the mg/L of the constituent, times the factor 0.0027, times the number of days.

Total recoverable.-- The amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual basic-data reports published after 1975.

WRD is used as an abbreviation for "Water-Resources Data" in the REVISED RECORDS paragraph to refer to State annual basic-data reports published before 1975.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indention in a list of stations in the front of the report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station such as 04041000, which appears just to the left of the station name, includes the 2-digit part number "04" plus the 6-digit downstream order number "041000".

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The 8-digit downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

The well and miscellaneous site numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits (assigned sequentially) identify the wells or other sites within a 1-second grid. See figure 1.

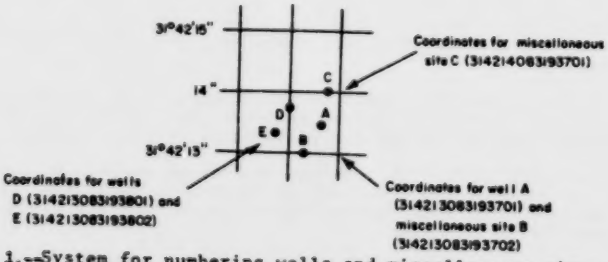

Figure 1.--System for numbering wells and miscellaneous sites (latitude and longitude)

SPECIAL NETWORKS AND PROGRAMS

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality.

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams where potential contamination could result from the application of commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard text-books, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-back water techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage height and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations, the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some northern stream-gaging stations, the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of gage-height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged,

the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs, a monthly summary table of stage and contents is given. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from the most accurate maps available. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use, the datum of the present gage referred to National Geodetic Vertical Datum; and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS" on page 4.

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS." For reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. Under "EXTREMES" are given first, the extremes for period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with "EXTREMES FOR THE CURRENT YEAR"; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion. In the yearly summary, below the monthly summary the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharge are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the

maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

Data collected at partial-record stations follow the information for continuous record sites. Data for partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made or water-quality samples are taken to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements and chemical analyses are also given in special tables following the tables of partial-record stations.

For gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents.

Accuracy of field data and computed results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good", within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other data available

Information of a more detailed nature than that published for most of the gaging stations such as observations of water temperatures, discharge measurements, gage-height records, and rating tables is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

Records of discharge collected by agencies other than the Geological Survey

Records of discharge not published by the Geological Survey were collected during water year 1978 at many sites in Ohio by the National Weather Service, NOAA, U.S. Department of Commerce, by the Corps of Engineers, U.S. Army and by other agencies. The National Water Data Exchange, Water Resources Division, U.S.Geological Survey, National Center, Reston, Va. 22092, maintains an index of such sites. Information on records available at specific sites can be obtained upon request.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and examination of data

Surface water samples for analyses usually are collected at or near gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, pH, dissolved oxygen, water temperature, sediment discharge, etc.); extremes for the period of daily record; extremes for the current year; and general remarks.

For ground-water records, descriptive statements are given; the well number, depth of well, date of sampling and/or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water analysis

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigations listed on a following page.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum and minimum values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the district office.

Water temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small daily temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, maximum and minimum temperatures for each day are published.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

Ground-water level data from a basic network of observation wells are published herein. This basic network contains observation wells so located that the most significant data are obtained from the fewest wells in the most important aquifers.

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is provided for local needs. See figure 2.

Measurements are made in many types of wells, under varying conditions of access and at different temperatures, hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Water-level measurements in this report are given in feet with reference to either mean sea level (msl) or land-surface datum (lsd). Mean sea level is the datum plane on which the national network of precise levels is based; land-surface datum is a datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum above mean sea level is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description.

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between sucessive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-four manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 1200 South Eads Street, Arlington, VA 22202 (authorized agent of the Superintendent of Documents, Government Printing Office. Prices are effective October 1978 but are subject to change.

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations".

1-D1. *Water temperature-influential factors, field measurement, and data presentation*, by H. H. Stevens Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages. $1.60.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W.W.Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages. $0.85

2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages. $1.90.

2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages. $1.75.

3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages. $1.00.

3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages. $0.35.

3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages. $0.40.

3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages. $1.00.

3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages. $0.35.

3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6, 1968, 13 pages. $1.00.

3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages. $1.40.

3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages. $1.25.

3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages. $1.20.

3-A12. *Fluorometric procedures for dye tracing*, by J. F. Wilson Jr.: USGS--TWRI Book 3, Chapter A12. 1968. 31 pages. $0.35. Not currently available.

3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages. $0.70.

3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2 1976. 172 pages. $2.50.

3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages. $2.50.

3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2, 1970. 59 pages. $2.50.

3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages. $2.10.

4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4 Chapter A1. 1968. 39 pages. $1.60.

4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages. $1.20

4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972, 18 pages. $0.65.

4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages. $0.75.

4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages. $0.65.

4-D1. *Computation of rate and volume of stream depletion by wells*, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages. $1.10.

5-A1. *Methods for collection and analysis of water samples for dissolved minerals and gases*, by Eugene Brown, M. W. Skougstad, and M. J. Fishman: USGS--TWRI Book 5, Chapter A1. 1970. 160 pages. $2.40.

5-A2. *Determination of minor elments in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages. $0.80.

5-A3. *Methods for analysis of organic substances in water*, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages. $0.90.

5-A4.* *Methods for collection and analysis of aquatic biological and microbiological samples*, edited by P.E. Greeson, T.A. Ehlke, G.A. Irwin, B.W. Lium, and K.V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages. $20.00.

5-A5.* *Methods for determination of radioactive substances in water and fluvial sediments*, by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages. $16.00.

5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages. $2.10.

7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages. $2.30.

8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages. $0.70.

8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages. $1.10.

*These publications are available ONLY from Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. They are in looseleaf format and are subscription items. Additional supplements will be issued to subscribers at no extra cost. Checks should be made payable to Superintendent of Documents. Requester should emphasize to Superintendent of Documents that this is a subscription item.

Figure 2a.--Location of data-collection stations.

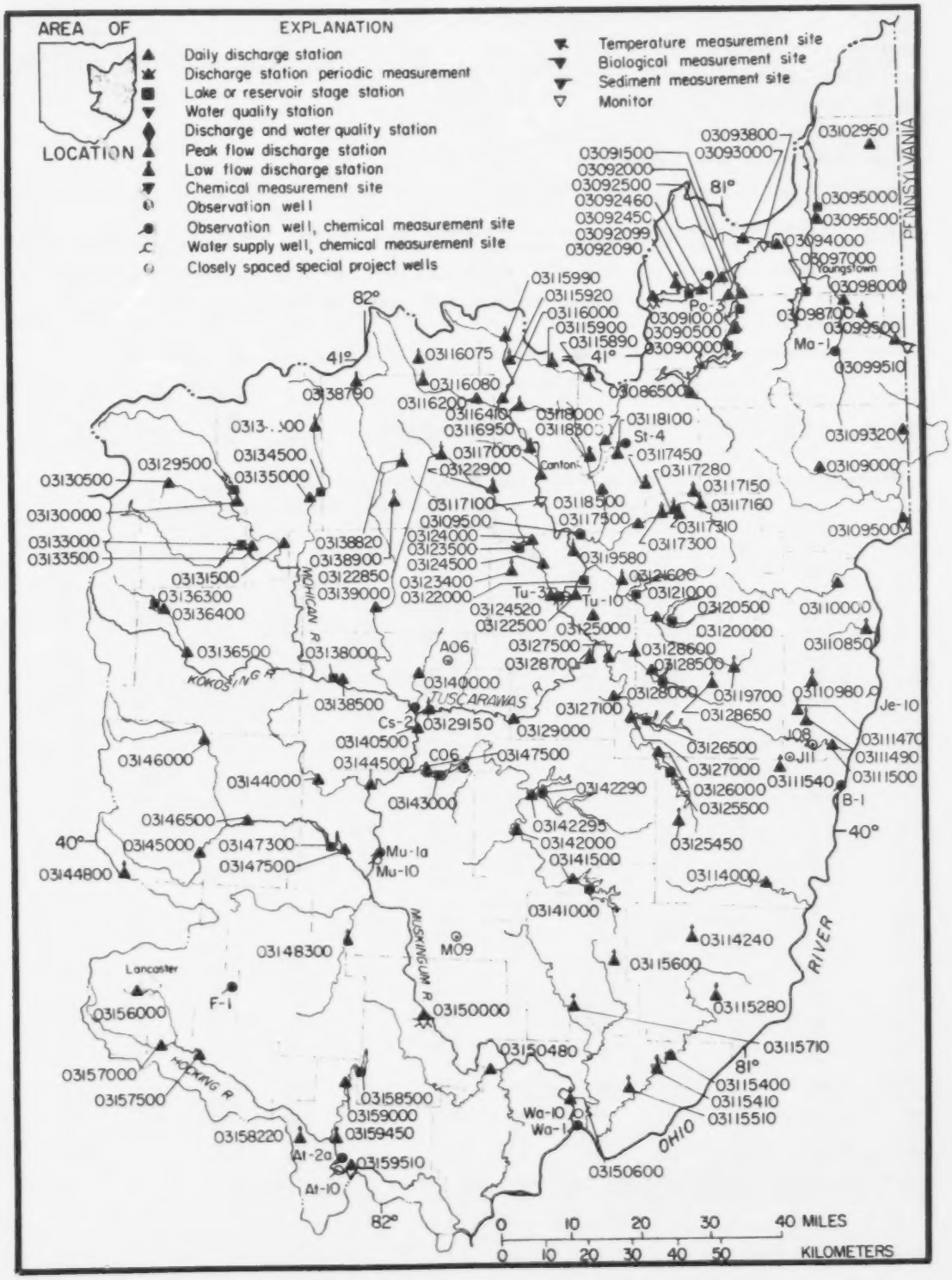

Figure 2b.--Location of data-collection stations.

STATION RECORDS

OHIO RIVER BASIN

BEAVER RIVER BASIN

03086500 MAHONING RIVER AT ALLIANCE, OH

LOCATION.--Lat 40°55'58", long 81°05'41", in SE 1/4 sec. 24, T.19 N., R.6 W., Stark County, Hydrologic Unit 05030103, on right bank 15 ft (5 m) upstream from Webb Avenue Bridge in Alliance, 0.2 mi (0.3 km) upstream from waterworks dam, and 4 mi (6 km) upstream from Beech Creek.

DRAINAGE AREA.--89.2 mi² (231 km²).

PERIOD OF RECORD.--August 1941 to current year.

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 1,037.3 ft (316.17 m) National Geodetic Vertical Datum of 1912.

REMARKS.--Records good except those for the winter periods, which are fair. Flow slightly regulated by Westville Reservoir 9.3 mi (15.0 km) upstream from station. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--37 years, 86.8 ft³/s (2.447 m³/s), 13.16 in/yr (334 mm/yr), unadjusted for diversion 1941-55.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,740 ft³/s (276 m³/s) Jan. 21, 1959, gage height, 9.11 ft (2.777 m), from rating curve extended above 3,300 ft³/s (93.5 m³/s) on basis of computation of peak flow over dam; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft³/s (25.5 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 11	1600	1590	45.0	4.16	1.268	Mar. 15	0200	*3400	96.3	*5.86	1.786
Dec. 6	1500	913	25.9	3.29	1.003	Aug. 11	0300	1030	29.2	3.42	1.042
Dec. 15	1200	2790	79.0	5.36	1.634						

Minimum daily discharge, 13 ft³/s (0.37 m³/s) Aug. 2, 24, 26-28, Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	30	605	42	140	38	121	30	33	23	15	69
2	276	33	456	42	130	38	93	30	30	38	13	35
3	171	33	245	42	110	38	197	28	44	326	30	28
4	79	33	217	42	90	38	419	30	28	235	23	28
5	46	68	151	44	80	38	331	50	26	93	17	23
6	46	68	717	47	70	38	215	47	20	53	206	21
7	46	40	450	65	65	38	265	38	14	38	201	17
8	109	88	160	230	60	38	174	47	220	35	240	17
9	310	207	164	342	55	38	109	310	440	35	113	17
10	113	98	150	206	50	48	89	300	420	30	642	17
11	49	486	130	255	48	50	81	125	260	25	817	19
12	35	189	120	225	46	100	89	81	50	21	245	23
13	35	124	151	197	46	400	73	174	59	19	105	50
14	32	109	934	161	44	1600	62	326	41	59	62	47
15	28	106	2610	138	44	2240	56	320	30	47	44	215
16	32	217	1450	121	44	712	50	453	25	30	35	105
17	32	420	558	105	42	397	47	359	23	23	28	47
18	30	426	210	85	42	255	47	516	23	21	21	33
19	32	136	200	80	42	240	81	290	260	19	21	28
20	30	109	190	70	42	300	134	147	225	17	21	21
21	28	260	230	65	40	320	125	134	85	17	17	23
22	28	352	138	60	40	353	113	97	50	17	15	28
23	33	168	105	55	40	225	81	77	35	65	15	23
24	46	136	101	55	40	156	81	275	28	179	13	19
25	28	74	201	60	40	134	73	320	23	73	15	17
26	25	74	97	305	38	290	62	129	35	35	13	15
27	25	65	73	386	38	677	56	81	50	25	13	15
28	25	55	65	392	38	516	47	59	125	25	13	15
29	25	62	56	295	---	220	41	47	53	21	25	13
30	25	109	44	215	---	138	35	41	30	21	33	17
31	28	---	44	170	---	117	---	38	---	17	69	---
TOTAL	1886	4375	11022	4597	1604	9822	3447	4999	2785	1682	3140	1045
MEAN	60.8	146	356	148	57.3	317	115	161	92.8	54.3	101	34.8
MAX	310	486	2610	392	140	2240	419	516	440	326	817	215
MIN	25	30	44	42	38	38	35	28	14	17	13	13
CFSM	.68	1.64	3.99	1.66	.64	3.55	1.29	1.81	1.04	.61	1.13	.39
IN.	.79	1.82	4.60	1.92	.67	4.10	1.44	2.08	1.16	.70	1.31	.44

CAL YR 1977 TOTAL 42561.2 MEAN 117 MAX 2610 MIN 8.1 CFSM 1.31 IN 17.75
WTR YR 1978 TOTAL 50404.0 MEAN 138 MAX 2610 MIN 13 CFSM 1.55 IN 21.02

03090500 MAHONING RIVER BELOW BERLIN DAM, NEAR BERLIN CENTER, OH

LOCATION.--Lat 41°02'54", long 81°00'05", in T.1 N., R.6 W., Mahoning County, Hydrologic Unit 05030103, on left bank 600 ft (183 m) downstream from Berlin Dam, and 3.2 mi (5.1 km) northwest of Berlin Center.

DRAINAGE AREA.--24 mi² (642 km²).

PERIOD OF RECORD.--October 1930 to current year. Prior to October 1942, published as "near Berlin Center".

REVISED RECORDS.--WSP 743: 1932. WSP 853: 1936. WSP 873: 1932-34, 1935(M), 1936-38. WSP 1907: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 958.00 ft (291.998 m) National Geodetic Vertical Datum of 1929, (levels by Corps of Engineers). Prior to Oct. 1, 1942, at site 1.8 mi (2.9 km) upstream at datum 966.15 ft (294.482 m) above mean sea level, adjustment of 1912, levels by Mahoning Valley Sanitary District. Oct. 1, 1942, to May 11, 1949, at site 200 ft (61 m) downstream from present site at datum 8.00 ft (2.438 m) lower than present datum.

REMARKS.--Records good. Flow regulated since 1942 by Berlin Lake (see station 03090000). Small diversion since 1958 from Berlin Lake to Meander Creek Reservoir (see station 03097000) by the Berlin pipeline. Water-quality data collected at this site 1965 to 1977.

COOPERATION.--Five discharge measurements furnished by Corps of Engineers.

AVERAGE DISCHARGE.--48 years, 232 ft³/s (6.570 m³/s) (unadjusted).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,630 ft³/s (244 m³/s) Jan. 25, 1937, gage height, 10.97 ft (3.344 m), site and datum then in use; no flow at times during 1948-49, 1967, 1970-71.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 960 ft³/s (27.2 m³/s) Nov. 22, gage height, 3.51 ft (1.07 m); minimum daily, 57 ft³/s (161 m³/s) Feb. 18-22, Feb. 26 to Mar. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	440	224	400	843	317	57	574	159	400	191	163	306
2	440	219	404	862	343	57	574	159	135	191	171	306
3	557	219	712	863	373	57	574	163	135	224	187	306
4	625	219	894	843	372	57	574	155	135	260	187	306
5	607	219	712	811	372	57	574	143	135	260	187	365
6	606	219	544	798	377	57	574	143	135	406	187	434
7	598	219	738	791	373	57	582	143	135	544	187	434
8	598	220	894	788	373	57	582	139	139	418	187	434
9	598	220	894	824	367	57	582	135	147	270	186	434
10	598	220	762	837	328	57	582	135	147	233	186	428
11	598	215	598	829	280	57	582	135	147	199	186	427
12	598	215	574	716	265	57	538	135	151	199	186	427
13	598	219	532	583	219	59	300	135	167	199	207	427
14	590	245	336	450	123	73	300	135	179	199	259	427
15	590	275	215	311	94	65	300	135	179	199	291	427
16	590	275	405	307	94	64	300	135	179	199	291	427
17	590	285	590	303	78	123	300	159	179	199	296	427
18	590	436	590	231	57	310	300	191	179	199	327	427
19	582	582	590	153	57	508	228	211	183	199	356	427
20	582	574	590	153	57	520	151	358	183	199	361	427
21	535	574	649	199	57	526	155	550	183	199	360	427
22	490	771	675	226	57	538	155	646	183	199	359	427
23	490	950	712	223	58	544	155	646	183	199	362	427
24	490	942	753	220	58	544	155	758	183	199	337	427
25	496	934	799	215	58	544	155	878	183	199	312	427
26	396	926	835	225	57	544	155	894	183	199	312	427
27	290	918	820	233	57	566	155	918	187	199	312	427
28	254	910	816	230	57	622	159	910	191	199	312	427
29	224	902	797	226	---	846	159	910	191	199	312	427
30	224	746	806	266	---	846	159	910	191	199	311	427
31	224	---	844	313	---	806	---	774	---	199	306	---
TOTAL	15688	14092	20480	14874	5398	9332	10633	11997	5227	7176	8183	12293
MEAN	506	470	661	480	193	301	354	387	174	231	264	410
MAX	625	950	894	863	377	846	582	918	400	544	362	434
MIN	224	215	215	153	57	57	151	135	135	191	163	306

CAL YR 1977 TOTAL 109350 MEAN 300 MAX 1930 MIN 50
WTR YR 1978 TOTAL 135373 MEAN 371 MAX 950 MIN 57

Note: No diversion during the year by Mahoning Valley Sanitary District.

03091500 MAHONING RIVER AT PRICETOWN, OH

LOCATION.--Lat 41°07'53", long 80°58'17", in T.2 N., R.5 W., Mahoning County, Hydrologic Unit 05030103, on left bank 0.3 mi (0.5 km) downstream from Milton Dam, 0.5 mi (0.8 km) southwest of Pricetown, and 3 mi (5 km) upstream from Kale Creek.

DRAINAGE AREA.--273 mi² (707 km²).

PERIOD OF RECORD.--July 1929 to current year.

REVISED RECORDS.--WSP 728: 1930(M). WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 905.00 ft (275.844 m) National Geodetic Vertical Datum of 1912. Prior to Aug. 14, 1929 nonrecording gage at same site and datum.

REMARKS.--Records fair. Flow regulated by Berlin Lake beginning 1942 and Milton Reservoir (see stations 03090000 and 03091000). Diversion upstream from station from Berlin Lake for part of municipal supply of Mahoning Valley Sanitary District (see station 03090500). Water-quality data collected at this site 1965 to 1977.

COOPERATION.--Ten discharge measurements furnished by Corps of Engineers.

AVERAGE DISCHARGE.--49 years, 255 ft³/s (7.222 m³/s) (unadjusted).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,770 ft³/s (192 m³/s) Jan. 25, 1937, gage height, 15.01 ft (4.575 m), from rating curve extended above 4,200 ft³/s (119 m³/s) on basis of velocity-area studies; minimum daily, 0.4 ft³/s (0.011 m³/s) Nov. 9, 1941, Feb. 19, 20, Oct. 11, 1945.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 902 ft³/s (25.5 m³/s) Dec. 14, gage height, 4.38 ft (1.335 m); maximum gage height 4.42 ft (1.347 m): May 30, 31, June 1; minimum daily discharge, 110 ft³/s (3.12 m³/s) Mar. 5-11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	396	321	578	862	357	112	876	133	760	217	189	325
2	400	321	491	862	357	112	870	148	580	220	184	325
3	477	321	885	862	357	112	872	154	427	293	181	325
4	585	321	885	862	357	112	869	154	281	343	174	325
5	655	318	770	862	357	110	862	154	281	343	172	388
6	655	318	716	859	357	110	862	154	281	458	172	437
7	652	318	888	855	357	110	862	154	281	563	169	433
8	655	318	891	857	357	110	858	154	281	440	165	433
9	655	318	891	861	357	110	855	142	269	287	165	433
10	652	318	894	866	314	110	851	120	269	252	162	433
11	652	318	890	867	259	110	712	116	275	207	160	440
12	648	318	885	870	259	111	424	116	278	207	158	454
13	648	318	877	864	199	112	193	116	252	207	196	454
14	645	315	560	857	128	118	133	116	209	204	244	454
15	645	315	290	851	127	116	133	117	179	199	258	454
16	641	315	547	842	127	115	131	119	172	199	255	454
17	641	318	885	830	125	114	131	118	172	202	258	451
18	641	456	882	706	125	116	131	119	174	202	269	451
19	638	593	878	425	125	116	133	179	160	202	293	451
20	638	593	878	261	125	117	133	403	151	204	293	451
21	631	645	873	261	125	119	133	606	151	204	290	451
22	617	870	870	261	121	120	131	654	169	204	287	447
23	613	870	868	261	115	120	131	704	202	204	287	447
24	613	874	866	261	115	122	131	740	204	204	287	447
25	613	874	866	261	114	123	131	880	204	204	307	447
26	512	878	866	265	113	125	131	880	207	202	322	437
27	396	882	866	263	114	256	131	880	194	202	322	424
28	372	882	866	261	112	754	131	880	184	199	322	424
29	321	882	866	261	---	880	131	884	186	196	322	424
30	321	886	862	298	---	879	131	884	199	196	325	424
31	321	---	862	357	---	879	---	888	---	194	325	---
TOTAL	17549	15594	24992	18991	6055	6630	12203	11866	7632	7658	7513	12743
MEAN	566	520	806	613	216	214	407	383	254	247	242	425
MAX	655	886	894	870	357	880	876	888	760	563	325	454
MIN	321	315	290	261	112	110	131	116	151	194	158	325

CAL YR 1977 TOTAL 116853 MEAN 320 MAX 2230 MIN 61
WTR YR 1978 TOTAL 149426 MEAN 409 MAX 894 MIN 110

03092000 MAIL CREEK NEAR PRICETOWN, OH

LOCATION.--Lat 41°08'23", long 80°59'43", in T.3 N., R.5 W., Trumbull County, Hydrologic Unit 05030103, on right bank at downstream side of county line road bridge, 0.4 mi (0.6 km) north of Mahoning-Trumbull County line, 1.5 mi (2.4 km) northwest of Pricetown, 2.2 mi (3.5 km) upstream from mouth, and 3.5 mi (5.6 km) south of Newton Falls.

DRAINAGE AREA.--21.9 mi² (56.7 km²).

PERIOD OF RECORD.--October 1940 to current year. Prior to June 1941 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 973: 1942. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 914.70 ft (278.800 m) National Geodetic Vertical Datum of 1912. Prior to June 27, 1941, nonrecording gage at same site and datum.

REMARKS.--Records fair. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--38 years, 23.0 ft³/s (0.651 m³/s), 14.27 in/yr (362 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,890 ft³/s (110 m³/s) Jan. 21, 1959, gage height, 8.52 ft (2.597 m); no flow at times in 1952-55, 1962-66.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft³/s (14.2 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 1	1000	716	20.3	4.87	1.484	Mar. 14	2300	1720	48.7	6.42	1.957
Dec. 14	2230	*1830	51.8	*6.56	1.999						

Minimum daily discharge, 0.27 ft³/s (0.008 m³/s) Aug. 29

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	6.0	532	4.8	40	4.4	21	3.8	6.6	1.1	.40	.40
2	106	6.0	106	4.8	20	4.2	16	3.5	5.0	1.1	.40	.33
3	28	6.0	39	4.8	14	4.2	87	3.5	4.1	39	.40	.36
4	13	7.0	33	4.8	10	4.2	123	3.5	3.7	15	.82	.36
5	8.2	10	28	4.8	9.0	4.2	155	5.5	3.7	3.0	.74	.40
6	6.4	37	115	5.2	8.0	4.2	48	7.3	3.7	1.1	.99	.36
7	5.9	66	74	6.1	7.5	4.2	103	7.0	3.7	.99	6.1	.33
8	8.0	90	37	80	7.0	4.2	42	6.3	3.7	.82	6.1	.36
9	74	70	24	195	6.5	4.2	20	15	13	.67	1.4	.40
10	67	151	22	92	6.5	4.6	14	23	3.1	.74	8.0	.36
11	20	243	18	44	6.5	10	12	11	1.2	.67	7.0	.49
12	11	59	17	24	6.0	44	16	8.2	1.4	.61	1.3	.49
13	7.8	53	22	17	6.0	185	13	20	2.2	.55	.82	.49
14	7.5	68	852	15	5.5	970	9.2	54	1.4	1.1	.74	.49
15	7.5	70	952	14	5.5	988	7.3	86	1.0	1.2	.55	.61
16	7.5	155	130	12	5.0	208	6.3	194	2.5	.82	.49	.55
17	7.5	403	93	11	5.0	115	6.1	109	1.9	.67	.49	.49
18	7.5	116	73	10	5.0	72	6.3	166	1.4	.67	.44	.67
19	7.0	38	67	9.0	4.8	67	8.2	37	6.8	.49	.40	.74
20	7.0	22	62	8.0	4.8	138	13	18	9.8	.49	.40	.67
21	7.0	26	76	7.0	4.6	126	18	35	4.1	.44	.40	.90
22	7.0	53	31	6.5	4.6	117	16	25	1.4	.40	.40	.82
23	9.0	27	19	6.5	4.6	47	12	13	1.2	.49	.36	.82
24	11	21	17	6.5	4.4	27	9.5	164	1.2	.67	.40	.82
25	7.0	17	61	16	4.4	20	8.7	102	1.2	.90	.40	.82
26	6.5	15	39	51	4.4	91	7.8	22	3.0	.67	.40	.74
27	6.0	14	13	129	4.4	311	6.4	11	17	.55	.40	.67
28	6.0	13	7.3	180	4.4	71	5.4	7.8	33	.61	.30	.67
29	6.0	12	5.9	190	---	32	4.8	6.1	5.0	.55	.27	.55
30	6.0	58	5.5	144	---	19	4.3	5.5	1.3	.55	.33	.55
31	6.0	---	5.0	80	---	15	---	7.8	---	.49	.36	---
TOTAL	512.3	1924.0	3575.7	1382.8	218.4	3715.6	819.3	1181.8	149.1	77.11	42.00	16.71
MEAN	16.5	64.1	115	44.6	7.80	120	27.3	38.1	4.97	2.49	1.35	.56
MAX	106	403	952	195	40	988	155	194	33	39	8.0	.90
MIN	5.9	6.0	5.0	4.8	4.4	4.2	4.3	3.5	1.2	.40	.27	.33
CFSM	.75	2.93	5.25	2.04	.36	5.48	1.25	1.74	.23	.11	.06	.03
IN.	.87	3.27	6.07	2.35	.37	6.31	1.39	2.01	.25	.13	.07	.03

CAL YR 1977 TOTAL 13592.73 MEAN 37.2 MAX 952 MIN .06 CFSM 1.70 IN 23.09
WTR YR 1978 TOTAL 13614.82 MEAN 37.3 MAX 988 MIN .27 CFSM 1.70 IN 23.13

03092090 WEST BRANCH MAHONING RIVER NEAR RAVENNA, OH

LOCATION.--Lat 41°09'41", long 81°11'50", in T.3 N., R.8 W., Portage County, Hydrologic Unit 05030103, on left bank at downstream side of bridge on Newton Falls Road, 2.5 mi (4.0 km) east of Ravenna.

DRAINAGE AREA.--21.8 mi² (56.5 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,011.8 ft (308.40 m) Portage County bench mark.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--13 years, 27.4 ft³/s (0.776 m³/s), 17.07 in/yr (434 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,090 ft³/s (59.2 m³/s) Apr. 15, 1972, gage height, 8.81 ft (2.685 m); minimum, 0.45 ft³/s (0.013 m³/s) Sept. 11, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 450 ft³/s (12.7 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 14	2100	*1030	29.2	*6.73	2.051	Mar. 14	2100	777	22.0	5.94	1.811

Minimum discharge, 1.1 ft³/s (0.031 m³/s) Sept. 9-11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	6.0	265	11	55	11	35	8.5	6.2	3.2	2.4	1.8
2	9.0	8.5	58	11	44	11	25	8.0	5.4	5.8	2.4	1.8
3	8.5	6.5	22	11	36	11	139	7.5	5.0	33	3.8	1.4
4	8.5	4.4	14	11	28	11	133	7.5	4.7	19	3.5	1.3
5	8.0	5.7	16	12	24	11	198	15	4.4	10	2.7	1.3
6	10	5.7	80	13	22	11	81	20	4.1	7.5	2.7	1.4
7	10	31	53	18	20	11	119	16	4.7	5.4	5.4	1.3
8	16	26	44	144	18	11	53	14	7.5	4.7	4.4	1.2
9	35	9.5	32	107	17	11	38	77	5.8	4.1	4.4	1.1
10	22	46	27	88	16	13	33	37	4.4	3.5	9.0	1.2
11	11	50	24	80	15	18	35	20	3.8	3.2	4.4	1.2
12	8.5	15	23	73	14	40	42	18	7.0	2.9	3.2	1.6
13	7.0	15	32	53	13	90	24	45	6.6	2.7	2.7	1.8
14	6.0	17	572	30	13	440	17	61	5.4	7.5	2.2	1.8
15	5.7	18	497	27	13	391	15	80	4.4	4.1	2.0	2.2
16	5.7	76	160	24	12	160	14	180	4.4	3.2	2.0	2.4
17	10	150	127	22	12	113	13	99	3.8	2.9	2.0	2.4
18	10	56	151	20	12	80	12	77	9.0	2.4	1.8	2.9
19	6.5	20	118	19	12	102	31	37	24	2.4	2.0	4.4
20	5.3	10	107	17	11	135	87	24	11	2.2	2.4	2.9
21	4.4	8.5	83	16	11	186	54	35	6.6	2.2	1.8	2.4
22	4.4	17	42	15	11	136	38	21	5.0	2.2	2.0	2.9
23	4.1	9.0	33	15	11	69	24	15	4.4	5.4	1.6	2.9
24	3.8	6.5	32	15	11	41	22	40	3.8	6.2	1.6	1.8
25	3.8	4.7	125	30	11	37	18	32	3.5	4.4	1.6	1.6
26	4.1	5.0	62	128	11	98	15	18	7.0	3.2	1.3	1.6
27	4.4	5.0	39	141	11	269	12	11	7.0	5.4	1.4	1.4
28	4.4	5.7	19	122	11	84	11	18	5.4	6.2	1.6	1.4
29	4.7	5.7	14	110	---	47	9.0	10	4.4	3.8	1.4	1.3
30	4.7	45	12	90	---	30	8.5	7.0	3.8	3.2	1.6	2.2
31	5.7	---	11	75	---	32	---	7.0	---	2.7	2.0	---
TOTAL	260.2	688.4	2894	1548	495	2710	1355.5	1065.5	182.5	174.6	83.3	56.9
MEAN	8.39	22.9	93.4	49.9	17.7	87.4	45.2	34.4	6.08	5.63	2.69	1.90
MAX	35	150	572	144	55	440	198	180	24	33	9.0	4.4
MIN	3.8	4.4	11	11	11	11	8.5	7.0	3.5	2.2	1.3	1.1
CFSM	.39	1.05	4.28	2.29	.81	4.01	2.07	1.58	.28	.26	.12	.09
IN.	.44	1.17	4.94	2.64	.84	4.62	2.31	1.82	.31	.30	.14	.10

CAL YR 1977 TOTAL 9045.4 MEAN 24.8 MAX 572 MIN 2.1 CFSM 1.14 IN 15.43
WTR YR 1978 TOTAL 11513.9 MEAN 31.5 MAX 572 MIN 1.1 CFSM 1.45 IN 19.65

03092090 WEST BRANCH MAHONING RIVER NEAR RAVENNA, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1965 to current year.

INSTRUMENTATION.--Water temperature recorder since October 1965.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 28.0°C Aug. 24, 1968; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 25.5°C July 22, 23; minimum, 0.0°C on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.5	15.0	10.5	9.0	5.5	3.0	1.0	.5	1.0	.5	.5	.5
2	16.0	14.0	12.0	9.0	5.5	3.5	1.0	.5	.5	.5	.5	.0
3	14.5	13.0	13.5	11.0	3.5	2.5	1.0	.5	1.0	.0	.5	.5
4	14.0	12.0	14.0	13.0	2.5	1.5	1.0	.0	.5	.0	.5	.5
5	12.5	11.0	15.5	13.5	1.5	.0	.5	.5	.5	.0	.5	.5
6	14.0	12.0	16.5	14.5	1.0	.0	.5	.5	.5	.0	.5	.5
7	13.0	11.0	16.0	14.5	.5	.0	.5	.0	.0	.0	.5	.5
8	12.5	11.0	15.0	14.5	.5	.0	.5	.0	.5	.0	.5	.5
9	13.0	11.5	15.5	14.0	1.0	.0	.5	.0	.5	.5	.5	.0
10	12.5	11.0	14.5	11.0	1.0	.0	.0	.0	.5	.5	.5	.0
11	11.5	10.0	13.0	7.0	.5	.0	.0	.0	1.0	.0	.5	.0
12	10.0	9.0	7.0	4.5	.5	.0	.0	.0	.5	.5	.5	.0
13	10.5	9.0	5.5	4.0	.5	.0	---	---	.5	.5	.5	.0
14	9.5	7.5	4.5	3.5	---	---	---	---	1.0	.5	1.0	.0
15	9.5	7.5	5.5	3.5	---	---	---	---	1.0	.5	.5	.5
16	9.5	8.0	7.5	5.5	---	---	1.0	.5	.5	.0	1.0	.5
17	8.5	7.0	8.0	7.5	---	---	.5	.5	.5	.5	1.5	.5
18	9.5	7.5	7.5	6.0	---	---	1.0	.5	.5	.0	2.0	1.0
19	10.0	8.5	6.5	5.0	---	---	.5	.5	.5	.0	2.5	1.5
20	10.0	8.0	7.5	6.0	---	---	.5	.5	.5	.0	2.5	1.5
21	10.0	7.5	8.5	7.0	---	---	.5	.5	.5	.0	3.5	2.0
22	11.0	8.5	7.0	5.5	---	---	.5	.5	.5	.5	3.5	2.5
23	10.0	9.0	6.5	5.5	---	---	.5	.0	.5	.5	4.5	3.5
24	11.0	8.5	6.5	6.0	---	---	.5	.0	.5	.5	6.5	4.0
25	11.0	9.5	6.0	5.0	---	---	.5	.0	.5	.5	4.0	3.0
26	13.0	10.5	5.0	1.5	---	---	.5	.0	.5	.5	4.0	3.0
27	12.5	11.0	1.0	.5	---	---	1.0	.0	.5	.5	4.0	3.5
28	13.5	11.5	1.0	.5	---	---	1.0	.0	.5	.0	4.5	3.5
29	11.5	9.0	1.5	.5	---	---	.5	.5	---	---	6.5	4.0
30	11.0	8.5	2.5	1.0	---	---	1.0	.5	---	---	7.5	4.0
31	10.5	8.5	---	---	---	---	1.0	.0	---	---	8.5	5.5
MONTH	16.5	7.0	16.5	.5	5.5	.0	1.0	.0	1.0	.0	8.5	.0

BEAVER RIVER BASIN

03092090 WEST BRANCH MAHONING RIVER NEAR RAVENNA, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	12.0	5.5	12.5	9.0	23.0	18.0	22.0	19.0	22.0	19.0	21.0	18.0
2	8.5	6.5	13.5	9.0	22.5	19.5	19.0	17.0	23.0	19.5	20.0	17.5
3	8.5	5.0	15.0	9.0	20.5	18.0	17.5	16.0	22.5	20.5	19.5	17.0
4	11.5	5.0	12.0	9.5	17.5	15.5	17.5	16.5	21.5	19.5	21.0	18.0
5	8.0	8.0	10.5	9.0	19.0	16.0	19.0	16.5	20.0	18.5	21.0	17.0
6	8.0	7.0	10.0	9.5	18.5	15.0	21.0	17.0	20.0	19.0	21.5	18.5
7	8.5	7.0	13.0	8.5	17.5	16.5	22.5	18.5	20.0	18.5	23.0	19.5
8	10.5	8.0	12.5	11.0	19.0	17.0	23.0	20.0	22.5	19.0	23.0	20.0
9	9.0	7.0	12.0	8.5	20.5	16.5	22.0	19.5	23.0	19.5	22.5	21.0
10	12.5	7.5	13.0	11.0	20.5	16.0	22.0	19.5	21.5	20.0	22.5	19.5
11	12.5	8.0	16.0	10.5	22.0	17.0	20.0	18.0	21.0	19.0	22.5	20.5
12	12.5	7.5	15.0	13.5	22.5	18.0	19.5	16.5	22.5	19.0	21.5	21.0
13	13.0	9.5	14.0	10.0	18.5	15.0	19.5	17.5	23.0	19.5	20.0	19.0
14	11.5	8.0	11.5	11.0	17.5	14.0	21.5	16.5	23.5	20.0	20.5	18.0
15	11.5	8.0	12.0	11.0	15.5	14.0	22.0	18.5	23.5	21.5	22.0	19.5
16	11.0	7.0	12.5	11.5	18.5	15.0	22.5	20.0	23.5	22.0	20.5	19.5
17	12.0	7.0	12.5	12.0	21.5	17.0	22.0	18.5	24.5	21.5	19.5	18.5
18	9.5	6.0	14.0	12.0	23.0	16.5	21.5	18.5	24.0	21.0	21.5	19.0
19	14.0	7.5	19.0	13.0	22.0	17.0	23.0	19.0	24.5	22.0	23.0	20.5
20	8.5	7.5	20.5	15.5	21.5	18.5	24.0	21.0	23.0	20.5	22.5	20.5
21	8.0	6.5	18.0	14.0	22.5	19.5	25.0	22.0	22.5	19.5	23.0	21.5
22	10.0	6.0	17.5	12.5	21.5	18.0	25.5	22.5	22.5	19.0	21.5	18.0
23	8.5	7.0	15.5	13.5	21.0	17.0	25.5	19.0	22.5	19.5	18.5	16.0
24	10.5	8.0	16.0	12.0	21.0	17.5	22.5	20.5	22.0	20.0	18.5	16.0
25	11.0	7.5	19.0	13.5	21.5	18.0	23.0	20.5	22.5	20.5	17.5	16.0
26	13.0	8.0	21.0	15.5	21.5	18.5	24.0	21.5	22.0	19.5	17.0	14.5
27	14.5	8.5	22.5	14.0	22.5	17.5	24.0	18.0	21.5	19.5	17.0	14.0
28	14.5	9.5	23.0	17.5	24.0	20.0	22.5	20.0	22.0	20.5	17.0	14.5
29	15.0	10.0	23.5	18.5	24.0	20.0	21.5	19.0	22.5	21.0	15.5	13.5
30	15.5	11.0	22.0	19.0	23.5	20.5	21.5	20.0	21.5	19.5	16.0	12.5
31	---	---	22.5	18.5	---	---	21.5	19.5	20.0	18.5	---	---
MONTH	15.5	5.0	23.5	8.5	24.0	14.0	25.5	16.0	24.5	18.5	23.0	12.5
YEAR	25.5	.0										

03092460 WEST BRANCH MAHONING RIVER BELOW MICHAEL J. KIRWAN DAM, AT WAYLAND, OH

LOCATION.--Lat 41°09'25", long 81°04'19", in T.3 N., R.6 W., Portage County, Hydrologic Unit 05030103, on right bank 200 ft (61 m) upstream from bridge on Wayland Road, 0.4 mi (0.6 km) downstream from Michael J. Kirwan Dam, and 0.2 mi (0.3 km) south of Wayland.

DRAINAGE AREA.--81.7 mi² (212 km²).

PERIOD OF RECORD.--October 1968 to current year. Prior to October 1969 published as "West Branch Mahoning River below West Branch Dam, at Wayland."

GAGE.--Water-stage recorder. Datum of gage is 926.44 ft (282.379 m) National Geodetic Vertical Datum of 1929, (levels by Corps of Engineers). Prior to October 1971 at datum 0.89 ft (0.271 m) higher.

REMARKS.--Records fair. Flow completely regulated by Michael J. Kirwan Reservoir (see station 03092450). Water-quality data collected at this site 1969 to 1977.

COOPERATION.--Five discharge measurements furnished by Corps of Engineers.

AVERAGE DISCHARGE.--10 years, 105 ft³/s (2.974 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,380 ft³/s (39.1 m³/s) Feb. 25, 1971, gage height, 11.82 ft (3.603 m) present datum; minimum daily, 2.5 ft³/s (0.071 m³/s) Apr. 9, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 549 ft³/s (15.5 m³/s) Dec. 14, gage height, 7.76 ft (2.365 m); minimum daily, 18 ft³/s (0.51 m³/s) Feb. 25 to Mar. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	178	234	440	150	18	21	23	25	110	81	41
2	96	177	94	434	150	18	22	23	25	111	78	41
3	96	176	189	431	147	18	33	23	25	99	86	41
4	96	176	264	382	149	18	32	24	25	50	86	41
5	96	175	274	271	148	18	33	24	25	28	86	41
6	96	174	273	270	123	18	24	24	25	29	86	41
7	96	179	358	269	68	18	27	24	25	28	100	41
8	98	174	407	248	54	18	23	24	25	28	90	41
9	102	172	415	172	54	18	22	26	25	28	96	42
10	100	181	439	150	38	18	22	25	25	54	97	42
11	96	175	471	151	19	18	22	24	25	86	92	42
12	99	172	459	150	19	20	22	24	25	86	92	42
13	98	174	449	149	19	23	22	27	46	86	92	42
14	115	208	338	149	19	70	22	26	77	80	92	42
15	136	253	109	147	19	44	22	31	101	71	92	43
16	137	259	141	148	19	25	22	31	109	72	93	43
17	139	263	220	149	19	23	22	33	109	80	94	43
18	138	264	337	147	19	21	22	29	110	88	94	43
19	139	328	444	148	19	23	22	26	111	89	94	43
20	139	325	448	149	19	24	22	26	110	89	94	43
21	139	325	442	150	19	25	22	26	109	89	90	44
22	139	322	436	150	19	22	22	26	109	90	90	44
23	141	320	451	150	19	21	22	26	109	92	61	44
24	141	319	468	149	19	21	22	28	109	92	54	44
25	143	317	476	144	18	22	22	26	109	92	51	44
26	164	317	467	149	18	27	22	26	111	92	41	44
27	162	315	468	153	18	32	23	25	110	92	41	44
28	160	314	460	151	18	22	23	25	110	93	41	44
29	160	313	453	151	---	21	23	25	110	93	41	44
30	174	323	449	151	---	21	23	25	110	93	41	45
31	178	---	445	152	---	21	---	25	---	92	41	---
TOTAL	3935	7388	11378	6204	1419	726	703	800	2169	2402	2369	1279
MEAN	127	246	367	200	50.7	23.4	23.4	25.8	72.3	77.5	76.4	42.6
MAX	180	328	476	440	150	70	33	33	111	111	100	45
MIN	95	172	94	144	18	18	21	23	25	28	41	41

CAL YR 1977 TOTAL 40398 MEAN 111 MAX 476 MIN 21
WTR YR 1978 TOTAL 40772 MEAN 112 MAX 476 MIN 18

03092500 WEST BRANCH MAHONING RIVER NEAR NEWTON FALLS, OH

LOCATION.--Lat 41°10'18", long 81°01'16", in T.3 N., R.6 W., Portage County, Hydrologic Unit 05030103, on right bank 250 ft (76 m) downstream from bridge on Newton Falls Road, 2.5 mi (4.0 km) southwest of Newton Falls, 6 mi (10 km) upstream from mouth, and 5 mi (8 km) downstream from Michael J. Kirwan Dam.

DRAINAGE AREA.--96.3 mi² (249 km²).

PERIOD OF RECORD.--June 1926 to current year.

REVISED RECORDS.--WSP 973: 1926-30, 1933, 1934(M), 1936-38, 1939(M), 1940. WSP 1385: 1929(M), 1945. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 912.2 ft (278.04 m) Corps of Engineers bench mark. Prior to Aug. 30, 1929, nonrecording gage at site 75 ft (23 m) upstream at same datum.

REMARKS.--Records good. Flow regulated by Michael J. Kirwan Reservoir (see station 03092450) since December 1966. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--52 years, 98.6 ft³/s (2.792 m³/s)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,340 ft³/s (236 m³/s) Jan. 22, 1959, gage height, 13.60 ft (4.145 m); minimum daily, 3.0 ft³/s (0.085 m³/s) Sept. 19, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 940 ft³/s (26.6 m³/s) Dec. 14, gage height, 6.70 ft (2.042 m); minimum daily, 22 ft³/s (0.62 m³/s) Feb 13 to Mar. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	162	472	395	166	22	41	28	29	112	86	44
2	105	162	118	389	164	22	36	28	28	122	84	44
3	98	162	196	385	158	22	112	28	28	59	92	45
4	96	162	261	365	160	22	143	27	28	34	92	44
5	95	162	294	277	156	22	159	33	27	31	92	44
6	95	162	298	277	140	22	67	32	27	30	95	44
7	94	187	359	277	92	22	107	31	28	30	112	44
8	97	184	415	325	63	22	54	30	28	29	100	44
9	125	170	407	252	56	22	42	46	28	54	112	44
10	113	221	467	237	53	25	39	41	27	97	149	44
11	99	232	500	218	38	30	40	33	27	97	107	44
12	96	179	440	196	23	46	40	32	27	97	95	44
13	95	182	484	162	22	86	34	54	35	100	94	44
14	105	209	718	162	22	432	32	63	66	86	94	44
15	135	279	400	160	22	316	30	81	86	84	92	44
16	134	340	190	158	22	133	29	144	97	86	92	44
17	136	382	244	160	22	94	29	107	97	97	92	44
18	135	301	333	158	22	64	31	107	99	99	92	45
19	134	332	464	158	22	76	34	52	105	99	92	45
20	135	322	470	158	22	92	42	40	100	99	92	45
21	135	325	455	160	22	103	39	49	99	99	86	45
22	134	329	419	160	22	86	37	41	99	99	63	45
23	133	319	421	160	22	52	33	36	97	119	63	44
24	133	314	442	162	22	41	32	64	97	102	58	44
25	133	310	484	160	22	39	31	54	97	100	56	44
26	130	310	538	185	22	89	30	37	107	99	45	44
27	140	308	607	277	22	184	29	33	102	100	45	44
28	162	306	691	201	22	67	29	31	99	99	45	44
29	162	304	705	185	---	46	28	31	97	99	45	44
30	162	337	460	175	---	37	28	30	97	99	44	45
31	162	---	400	177	---	39	---	30	---	99	45	---
TOTAL	3805	7654	13152	6871	1621	2375	1457	1473	2008	2656	2551	1327
MEAN	123	255	424	222	57.9	76.6	48.6	47.5	66.9	85.7	82.3	44.2
MAX	162	382	718	395	166	432	159	144	107	122	149	45
MIN	94	162	118	158	22	22	28	27	27	29	44	44

CAL YR 1977 TOTAL 45565 MEAN 125 MAX 718 MIN 22
WTR YR 1978 TOTAL 46950 MEAN 129 MAX 718 MIN 22

03093000 EAGLE CREEK AT PHALANX STATION, OH

LOCATION.--Lat 41°15'40", long 80°57'16", Trumbull County, Hydrologic Unit 05030103, on right bank 75 ft (23 m) downstream from county road bridge, 1 mi (2 km) north of Phalanx Station, 2 mi (3 km) downstream from Tinkers Creek, and 4 mi (6 km) upstream from mouth.

DRAINAGE AREA.--97.6 mi² (253 km²).

PERIOD OF RECORD.--June 1926 to September 1934, October 1937 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 953: 1938-41. WSP 1305: 1927-30, 1931-32(M), 1934, 1938-41(P). WSP 1555: 1928(M), 1929. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 887.14 ft (270.400 m) National Geodetic Vertical Datum of 1912, (levels by Mahoning Valley Sanitary District). Prior to Sept. 14, 1929, nonrecording gage at same site and datum. Sept. 14, 1929 to Sept. 30, 1977 at same site and datum 0.28 ft higher.

REMARKS.--Records fair. Low flow slightly regulated by mill several miles upstream from station. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--49 years, 108 ft³/s (3.059 m³/s), 15.03 in/yr (382 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,700 ft³/s (190 m³/s) Jan. 22, 1959, gage height, 13.12 ft (3.999 m); minimum daily, 0.9 ft³/s (0.025 m³/s) Aug. 4, 1939.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,300 ft³/s (36.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 15	1130	*5140	146	*12.82	3.908	Mar. 15	---	3000	85.0	ice jam	

Minimum daily discharge, 9.4 ft³/s (0.27 m³/s) Sept. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	39	589	75	243	70	157	54	58	26	15	16
2	43	43	830	70	207	65	141	51	46	31	16	15
3	46	45	285	69	183	65	223	49	42	275	24	16
4	36	46	179	69	160	65	533	48	41	502	21	16
5	30	50	135	70	146	65	724	68	37	160	20	15
6	27	35	206	71	138	65	480	101	32	83	18	11
7	26	135	332	76	128	65	380	93	32	56	24	12
8	33	286	271	242	120	65	319	73	57	44	83	9.4
9	135	191	245	572	113	65	199	183	58	37	52	9.8
10	208	177	225	330	108	76	167	282	40	32	52	13
11	119	376	208	250	104	99	159	148	36	26	59	15
12	70	275	184	200	101	154	190	101	30	24	36	17
13	54	203	178	180	100	237	152	159	45	23	28	16
14	44	217	569	160	95	669	121	292	42	34	21	18
15	42	226	3730	150	90	2300	102	294	31	40	18	18
16	48	405	1580	140	90	1400	93	638	36	26	18	21
17	37	648	665	120	85	750	86	532	29	22	20	16
18	33	610	481	110	85	500	76	469	30	20	18	19
19	33	267	535	100	80	400	94	287	59	19	18	23
20	35	154	470	95	80	529	166	174	61	19	18	22
21	43	126	498	90	80	560	203	171	37	21	21	18
22	44	149	313	85	75	729	172	153	30	21	18	19
23	41	118	206	85	75	430	133	106	27	21	17	18
24	36	102	173	85	75	269	111	137	26	45	15	16
25	29	87	322	133	75	199	99	245	25	28	15	15
26	32	87	416	256	70	267	88	148	47	20	12	12
27	37	90	222	336	70	691	77	96	147	18	14	11
28	37	88	160	466	70	581	69	77	68	24	15	12
29	41	86	130	504	---	287	64	68	38	27	12	11
30	50	113	93	391	---	199	60	56	30	23	14	11
31	49	---	82	297	---	160	---	68	---	19	15	---
TOTAL	1506	5494	14512	5879	3046	12076	5638	5421	1317	1766	747	461.2
MEAN	50.5	183	468	190	109	390	188	175	43.9	57.0	24.1	15.4
MAX	208	648	3730	572	243	2300	724	638	147	502	83	23
MIN	26	39	82	69	70	65	60	48	25	18	12	9.4
CFSM	.52	1.88	4.80	1.95	1.12	4.00	1.93	1.79	.45	.58	.25	.16
IN.	.60	2.09	5.53	2.24	1.16	4.60	2.15	2.07	.50	.67	.28	.18

CAL YR 1977 TOTAL 50512.0 MEAN 138 MAX 3730 MIN 13 CFSM 1.41 IN 19.25
WTR YR 1978 TOTAL 57923.2 MEAN 159 MAX 3730 MIN 9.4 CFSM 1.63 IN 22.08

03093800 MAHONING RIVER ABOVE DUCK CREEK, AT LEAVITTSBURG, OH

LOCATION.--Lat 41°14'22", long 80°52'56", Trumbull County, Hydrologic Unit 05030103, on left bank 10 ft (3 m) upstream from Ohio Edison Company diversion dam, 30 ft (9 m) upstream from Duck Creek, and 330 ft (101 m) upstream from gaging station at bridge on Leavitt Road in Leavittsburg.

DRAINAGE AREA.--542 mi² (1,404 km²).

PERIOD OF RECORD.--Water years 1952-53, July 1967 to September 1968 (published as "at Leavittsburg"), October 1968 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1967 to current year.
pH: July 1967 to current year.
WATER TEMPERATURES: July 1967 to current year.
DISSOLVED OXYGEN: July 1967 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. See records of daily discharge for gaging station at Leavittsburg (station 03094000).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 780 micromhos May 27, 1969; minimum, 187 micromhos July 12, 1976.
pH: Maximum, 8.5 units Aug. 5, 1968; minimum, 5.2 units Jan. 8, 1973.
WATER TEMPERATURES: Maximum, 28.0°C June 29, 30, 1952; minimum, 0.0°C on many days during winter periods.
DISSOLVED OXYGEN: Maximum, 15.0 mg/L or higher Dec. 31, 1972, Jan. 1-3, 1973; minimum, 4.2 mg/L June 12, 13, 1971.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 627 micromhos Mar. 9; minimum, 222 micromhos Mar. 16.
pH: Maximum recorded, 8.0 units Apr. 26, 27; minimum recorded, 5.8 units Feb. 4.
WATER TEMPERATURES: Maximum, 25.0°C July 22; minimum, 0.0°C on many days during winter period.
DISSOLVED OXYGEN: Maximum, 14.6 mg/L Jan. 6; minimum, 4.8 mg/L July 25.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	488	473	539	519	518	404	434	399	437	416	560	522
2	489	479	536	513	399	318	426	405	434	419	555	539
3	485	465	531	513	468	341	425	401	452	420	567	548
4	494	471	528	521	494	473	422	399	473	432	564	546
5	506	491	528	513	507	491	413	395	465	443	561	548
6	504	482	528	516	503	467	---	---	482	456	572	549
7	506	489	534	524	471	446	---	---	497	459	575	557
8	513	507	528	509	474	453	---	---	564	497	602	561
9	560	512	510	495	483	473	---	---	578	470	627	545
10	552	513	528	507	485	468	---	---	519	483	572	557
11	521	494	498	440	477	464	---	---	516	495	587	567
12	522	510	470	431	489	468	---	---	512	497	596	572
13	525	512	503	471	488	483	420	395	510	500	581	551
14	539	515	516	477	492	333	416	395	506	491	546	308
15	540	509	486	473	324	249	441	416	519	492	305	237
16	537	522	477	425	284	234	441	392	512	503	248	222
17	540	524	425	380	363	296	441	432	519	501	269	246
18	533	515	---	---	387	362	450	431	521	509	299	258
19	540	515	---	---	386	378	455	434	528	510	324	297
20	546	524	---	---	386	378	440	432	534	516	326	300
21	551	515	---	---	378	368	443	435	537	519	299	282
22	543	518	---	---	364	366	446	432	546	522	288	249
23	546	537	---	---	417	386	456	432	545	525	297	258
24	546	515	---	---	428	414	---	---	548	537	327	303
25	543	527	---	---	434	396	---	---	546	537	381	330
26	537	512	---	---	395	377	486	456	537	522	401	383
27	543	512	---	---	413	390	476	441	530	515	404	312
28	537	510	---	---	420	416	438	407	536	521	344	285
29	546	507	---	---	416	401	417	387	---	---	410	348
30	546	510	528	510	426	401	414	395	---	---	434	401
31	540	518	---	---	425	407	434	390	---	---	435	425
MONTH	560	465	539	380	518	234	486	387	578	416	627	222

03093800 MAHONING RIVER ABOVE DUCK CREEK, AT LEAVITTSBURG, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	434	410	---	---	408	383	431	416	461	437	527	461
2	431	399	---	---	408	389	446	432	458	432	495	461
3	422	396	---	---	423	402	456	401	453	441	488	462
4	402	332	447	432	431	407	389	338	464	432	483	461
5	342	302	447	441	431	413	399	363	456	438	489	458
6	341	305	450	441	450	408	425	404	458	447	483	459
7	355	330	457	421	432	426	441	419	461	438	480	458
8	379	348	441	433	434	419	441	426	501	452	482	458
9	389	360	450	435	447	417	452	429	488	458	480	465
10	386	346	440	382	450	432	456	438	474	435	486	465
11	391	367	408	390	450	413	465	444	438	384	483	461
12	391	363	450	402	435	417	473	432	453	413	486	474
13	398	372	470	421	455	437	452	426	453	426	491	476
14	405	374	424	385	464	428	440	417	450	425	492	476
15	404	383	390	375	461	425	437	386	489	434	489	470
16	412	375	369	302	452	414	456	428	450	440	491	474
17	412	370	303	278	431	402	470	435	458	435	492	477
18	404	387	302	281	419	402	461	428	456	432	486	470
19	392	365	308	278	423	410	449	419	456	438	486	464
20	447	389	354	308	423	393	440	414	464	443	489	467
21	448	406	392	360	429	411	435	417	465	441	489	471
22	429	387	405	374	452	432	438	416	471	443	501	483
23	434	403	401	384	443	408	437	420	474	450	515	480
24	440	419	393	380	437	405	456	422	474	452	513	476
25	447	405	399	339	428	401	434	413	470	453	506	480
26	438	402	380	357	425	413	446	431	480	458	522	483
27	447	408	392	366	425	404	443	428	483	462	521	483
28	---	---	398	371	428	405	447	429	474	462	516	489
29	---	---	399	372	464	425	450	431	477	461	528	486
30	---	---	401	380	461	389	461	446	479	470	516	485
31	---	---	401	381	---	---	467	443	482	465	---	---
MONTH	448	302	470	278	64	383	473	338	501	384	528	458
YEAR	627	222										

03093800 BARDWING RIVER ABOVE DUCK CREEK, AT LEAVITTSBURG, OH--Continued

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.6	7.6	7.7	7.6	7.5	7.2	---	---	---	---	7.3	7.0
2	7.6	7.6	7.7	7.6	7.1	6.9	---	---	---	---	7.3	7.2
3	7.6	7.5	7.7	7.6	7.5	7.0	---	---	---	---	7.3	7.2
4	7.7	7.6	7.6	7.6	7.6	7.5	---	---	7.3	5.8	7.3	7.1
5	7.7	7.6	7.6	7.5	7.6	7.6	---	---	7.2	6.2	7.3	7.2
6	7.7	7.7	7.6	7.5	7.5	7.3	7.5	7.4	7.2	6.7	7.3	7.2
7	7.8	7.7	7.6	7.5	7.5	7.1	7.5	7.4	7.3	6.3	7.3	7.2
8	7.7	7.7	7.5	7.5	7.4	7.1	7.4	7.2	7.3	7.2	7.4	7.3
9	7.7	7.6	7.5	7.3	7.5	7.4	7.4	7.1	7.3	6.6	7.4	6.9
10	7.7	7.6	7.6	7.5	7.5	7.1	---	---	7.2	6.6	7.2	7.0
11	7.7	7.7	7.5	7.3	---	---	---	---	7.2	6.8	7.3	6.9
12	7.8	7.7	7.5	7.3	---	---	---	---	7.1	6.9	7.3	7.2
13	7.8	7.8	7.6	7.5	---	---	---	---	7.0	6.7	7.2	7.0
14	7.8	7.8	7.6	7.5	---	---	---	---	7.1	6.7	7.2	6.7
15	7.8	7.8	7.5	7.4	---	---	---	---	7.1	6.2	6.7	6.6
16	7.9	7.8	7.5	7.3	---	---	---	---	6.9	6.7	6.6	6.5
17	7.9	7.8	7.3	7.2	---	---	---	---	7.0	6.7	6.7	6.6
18	7.9	7.8	7.2	7.1	---	---	---	---	7.1	6.9	6.8	6.5
19	7.9	7.8	7.5	7.2	---	---	---	---	7.2	7.0	6.9	6.8
20	7.9	7.8	7.6	7.5	---	---	---	---	7.2	7.0	6.9	6.7
21	7.9	7.8	7.7	7.6	---	---	---	---	7.2	7.0	6.8	6.8
22	7.9	7.8	7.8	7.6	---	---	---	---	7.2	7.0	6.8	6.6
23	7.9	7.8	7.7	7.7	---	---	---	---	7.2	7.0	6.7	6.6
24	7.9	7.8	7.8	7.7	---	---	---	---	7.2	7.1	6.9	6.7
25	7.9	7.8	7.8	7.7	---	---	---	---	7.2	7.2	7.1	6.8
26	7.9	7.8	---	---	---	---	---	---	7.2	7.1	7.2	7.1
27	7.9	7.7	---	---	---	---	---	---	7.2	7.0	7.1	6.9
28	7.7	7.6	---	---	---	---	---	---	7.2	7.0	7.0	6.8
29	7.7	7.6	---	---	---	---	---	---	---	---	7.1	7.0
30	7.7	7.6	7.7	7.5	---	---	---	---	---	---	7.2	7.1
31	7.7	7.6	---	---	---	---	---	---	---	---	7.2	7.2
MONTH	7.9	7.5	7.8	7.1	7.6	6.9	7.5	7.1	7.3	5.8	7.4	6.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.3	7.2	---	---	7.6	7.5	7.3	7.2	7.4	7.4	7.5	7.4
2	7.3	7.3	---	---	7.6	7.5	7.3	7.3	7.4	7.4	7.4	7.3
3	7.3	7.2	---	---	7.5	7.5	7.4	7.3	7.4	7.4	7.4	7.4
4	7.2	7.1	---	---	7.5	7.5	7.2	7.0	7.4	7.4	7.5	7.4
5	7.1	7.0	---	---	7.5	7.4	7.2	7.1	7.4	7.4	7.5	7.3
6	7.0	7.0	---	---	7.5	7.4	7.3	7.2	7.4	7.4	7.6	7.3
7	7.2	7.0	---	---	7.5	7.4	7.4	7.3	7.4	7.2	7.6	7.4
8	7.2	7.2	---	---	7.5	7.4	7.5	7.4	7.4	7.3	7.6	7.5
9	7.2	7.1	---	---	7.6	7.5	7.4	7.4	7.4	7.3	7.6	7.5
10	7.3	7.2	---	---	7.6	7.5	7.4	7.3	7.4	7.3	7.6	7.5
11	7.3	7.2	---	---	7.5	7.5	7.4	7.3	7.3	7.2	7.5	7.5
12	7.3	7.3	---	---	7.5	7.5	7.4	7.3	7.3	7.2	7.6	7.5
13	7.4	7.3	---	---	7.5	7.5	7.4	7.3	7.3	7.2	7.7	7.5
14	7.3	7.3	---	---	7.5	7.5	7.4	7.3	7.3	7.2	7.6	7.5
15	7.3	7.3	---	---	7.5	7.5	7.4	7.3	7.4	7.3	7.7	7.5
16	7.4	7.3	---	---	7.5	7.5	7.4	7.3	7.4	7.3	7.7	7.6
17	7.4	7.3	---	---	7.5	7.4	7.5	7.4	7.5	7.3	7.6	7.6
18	7.5	7.4	---	---	7.5	7.4	7.4	7.3	7.6	7.4	7.6	7.5
19	7.5	7.4	---	---	7.5	7.4	7.4	7.3	7.5	7.4	7.7	7.5
20	7.5	7.5	---	---	7.5	7.4	7.4	7.3	7.5	7.4	7.7	7.6
21	7.6	7.5	---	---	7.6	7.5	7.4	7.3	7.4	7.3	7.6	7.5
22	7.7	7.5	---	---	7.6	7.5	7.4	7.3	7.4	7.2	7.7	7.6
23	7.7	7.6	---	---	7.5	7.5	7.4	7.3	7.4	7.3	7.7	7.6
24	7.7	7.6	---	---	7.6	7.5	7.4	7.3	7.4	7.3	7.7	7.6
25	7.8	7.6	---	---	7.6	7.5	7.3	7.3	7.4	7.3	7.7	7.7
26	8.0	7.7	---	---	7.5	7.5	7.4	7.3	7.4	7.3	7.8	7.7
27	8.0	7.9	---	---	7.6	7.5	7.4	7.3	7.4	7.3	7.7	7.6
28	---	---	---	---	7.5	7.4	7.4	7.3	7.4	7.3	7.8	7.7
29	---	---	---	---	7.4	7.4	7.4	7.4	7.4	7.4	7.9	7.7
30	---	---	7.5	7.5	7.3	7.2	7.4	7.4	7.5	7.4	7.8	7.7
31	---	---	7.5	7.5	---	---	7.4	7.4	7.5	7.4	---	---
MONTH	8.0	7.0	7.5	7.5	7.6	7.2	7.5	7.0	7.6	7.2	7.9	7.3
YEAR	8.0	5.8										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

BEAVER RIVER BASIN

03093800 MAHONING RIVER ABOVE DOCK CREEK, AT LEAVITTSBURG, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.5	18.5	11.0	10.5	4.0	3.5	.5	.0	.0	.0	.0	.0
2	19.0	17.5	12.0	10.5	4.0	3.5	.5	.0	.0	.0	.0	.0
3	17.5	16.0	12.5	11.5	3.5	3.0	.0	.0	.0	.0	.0	.0
4	17.0	16.0	13.0	12.5	3.0	3.0	.0	.0	.0	.0	.0	.0
5	17.0	16.0	13.5	13.0	3.0	2.0	.5	.0	.0	.0	.0	.0
6	17.0	15.5	14.0	13.5	2.0	1.5	1.0	.0	.0	.0	.0	.0
7	17.0	15.0	14.0	13.5	1.5	.5	1.5	1.0	.0	.0	.0	.0
8	15.0	15.0	14.0	13.5	.5	.0	1.5	.0	.0	.0	.0	.0
9	15.0	13.5	14.0	13.5	.0	.0	.5	.0	.0	.0	.5	.0
10	14.0	13.0	13.5	12.0	1.0	.0	---	---	.0	.0	.5	.5
11	13.5	13.0	11.5	8.5	.0	.0	---	---	.0	.0	1.0	.5
12	13.0	12.5	8.5	7.0	.0	.0	---	---	.0	.0	1.0	1.0
13	12.5	12.0	7.0	6.5	.5	.0	.5	.0	.0	.0	1.5	1.0
14	12.0	11.5	6.5	6.0	.5	.0	.5	.0	.0	.0	1.0	.5
15	12.0	11.5	6.0	5.5	.5	.0	.0	.0	.0	.0	.5	.5
16	12.0	11.0	7.0	6.0	1.0	.0	.0	.0	.0	.0	.5	.5
17	11.0	10.5	7.5	7.0	1.0	.0	.0	.0	.0	.0	.5	.5
18	11.5	10.5	7.0	6.0	1.5	1.0	.0	.0	.0	.0	1.0	.5
19	11.0	10.5	6.5	6.0	2.0	2.0	.0	.0	.0	.0	1.5	.5
20	11.0	10.0	7.0	6.5	2.0	2.0	.0	.0	.0	.0	1.5	1.0
21	10.5	10.0	8.0	7.5	2.0	1.0	.0	.0	.0	.0	2.0	1.0
22	11.5	10.0	7.5	6.5	1.0	.0	.0	.0	.0	.0	3.0	1.5
23	11.0	10.0	6.5	6.5	.5	.0	.0	.0	.0	.0	4.5	3.0
24	11.0	10.0	7.0	6.5	1.5	.0	---	---	.0	.0	5.0	4.0
25	11.0	10.0	6.5	6.0	1.5	.0	---	---	.0	.0	4.5	3.5
26	12.5	11.0	---	---	.0	.0	.0	.0	.0	.0	3.5	3.0
27	13.0	11.5	---	---	.0	.0	.0	.0	.0	.0	3.5	3.0
28	12.5	12.0	---	---	.0	.0	.0	.0	.0	.0	4.0	3.0
29	12.0	11.0	---	---	.0	.0	.0	.0	---	---	4.0	3.5
30	11.0	10.5	3.5	3.5	.0	.0	.0	.0	---	---	4.0	3.5
31	11.0	10.0	---	---	.0	.0	.0	.0	---	---	4.0	4.0
MONTH	19.5	10.0	14.0	3.5	4.0	.0	1.5	.0	.0	.0	5.0	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	5.5	4.0	---	---	18.5	18.0	22.5	20.5	22.5	21.0	22.0	21.0
2	5.5	4.0	---	---	19.5	18.5	20.5	18.5	22.5	21.0	22.0	20.5
3	5.0	4.0	---	---	19.0	17.5	18.5	17.0	22.5	22.0	22.0	21.0
4	8.5	5.0	12.5	11.5	18.0	17.0	17.5	17.0	23.0	22.0	22.5	21.5
5	9.5	6.5	11.5	11.0	17.5	16.5	19.0	17.5	22.0	20.5	22.5	21.5
6	9.5	7.5	11.0	10.0	18.5	17.0	21.0	18.5	20.5	20.0	23.5	21.5
7	9.0	7.5	11.5	9.5	18.5	17.0	22.5	20.0	20.5	20.0	24.5	22.5
8	9.5	8.5	12.0	11.0	19.0	17.5	23.0	21.5	21.0	20.0	24.5	23.0
9	8.0	7.5	14.0	12.0	19.5	18.0	22.5	21.5	22.0	20.0	24.5	23.0
10	8.5	7.5	13.5	13.0	19.5	18.0	22.5	21.5	22.0	21.5	23.5	22.5
11	9.5	9.0	15.0	13.0	20.5	19.0	21.5	20.5	21.5	20.0	24.0	22.5
12	10.5	9.5	15.0	14.0	21.0	20.0	21.0	19.5	21.5	20.5	23.5	23.0
13	11.5	10.5	15.0	14.5	20.5	19.0	20.0	19.0	22.0	20.5	23.0	22.5
14	11.0	10.5	14.5	13.5	19.0	17.5	21.0	19.5	22.5	21.0	22.5	21.5
15	10.5	10.0	13.5	13.0	17.5	16.5	22.0	20.0	23.0	22.0	23.0	22.0
16	10.5	9.0	13.5	13.0	18.0	17.0	22.5	21.5	23.0	22.5	22.5	22.0
17	10.0	9.0	13.5	13.0	19.5	17.5	22.5	21.0	23.5	22.5	22.5	21.5
18	10.0	9.5	15.0	13.5	20.5	19.0	22.5	20.5	24.0	22.5	23.0	21.5
19	11.0	9.5	17.0	15.0	21.5	20.0	22.5	20.5	24.0	23.0	24.0	22.5
20	11.0	10.0	19.0	17.0	22.0	21.0	23.5	21.5	23.5	22.5	24.5	23.0
21	9.5	8.5	18.5	16.0	21.5	21.0	24.5	22.5	23.0	22.0	24.0	23.0
22	9.0	7.5	16.0	14.5	21.5	20.0	25.0	23.0	22.5	21.0	23.5	22.0
23	8.5	8.0	16.0	15.0	21.0	19.5	24.5	23.5	23.0	22.0	22.0	20.0
24	9.5	8.5	16.0	15.0	21.0	19.0	23.5	22.5	23.5	22.5	21.0	19.5
25	10.0	9.0	17.0	15.5	21.0	19.5	23.0	21.5	23.5	23.0	21.0	19.5
26	11.0	9.5	17.0	17.0	20.5	20.0	23.0	21.5	23.5	23.0	20.0	19.0
27	11.5	10.0	17.5	17.0	21.5	20.0	23.0	22.5	23.0	22.0	20.0	18.5
28	---	---	18.5	17.5	22.5	20.5	23.0	22.0	23.5	23.0	20.0	19.0
29	---	---	18.5	17.5	23.0	21.5	22.5	21.5	24.0	23.0	19.0	18.0
30	---	---	18.5	17.5	23.0	22.0	22.0	21.0	24.0	22.5	19.0	17.5
31	---	---	19.0	17.5	---	---	21.5	21.0	22.5	22.0	---	---
MONTH	11.5	4.0	19.0	9.5	23.0	16.5	25.0	17.0	24.0	20.0	24.5	17.5
YEAR	25.0	.0										

03093800 MAHONING RIVER ABOVE DUCK CREEK, AT LEAVITTSBURG, OH--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.4	8.1	9.2	9.1	11.7	11.1	13.1	12.9	10.8	10.5	13.1	12.6
2	8.[illegible]	7.9	9.2	9.0	10.7	10.6	13.1	12.8	10.9	10.7	13.1	12.8
3	8.7	8.3	9.1	8.8	11.6	10.7	13.3	13.1	11.3	10.8	13.2	12.9
4	9.0	8.3	8.8	8.5	12.1	11.6	13.3	13.2	11.6	11.2	13.2	12.9
5	8.8	8.7	8.6	8.4	12.0	11.9	13.2	12.9	11.7	11.4	13.2	12.9
6	9.0	8.7	8.6	8.4	11.9	11.5	14.6	13.1	11.6	11.0	13.3	12.9
7	9.3	8.9	8.4	7.7	12.2	11.4	14.0	13.6	11.3	11.0	13.5	13.1
8	9.0	8.8	7.5	7.3	12.4	11.9	13.6	12.8	11.6	11.0	13.5	11.6
9	9.0	8.8	7.7	7.4	12.4	12.1	12.9	12.8	11.6	10.9	11.8	11.3
10	9.4	9.0	8.1	7.7	12.5	12.3	---	---	11.2	10.7	11.4	11.2
11	9.4	9.2	9.0	8.1	12.5	12.2	---	---	11.1	10.7	11.2	11.0
12	9.6	9.4	9.8	9.0	12.4	12.2	---	---	10.7	10.5	11.2	11.0
13	9.9	9.6	10.5	10.1	12.2	12.0	13.0	12.8	10.6	10.2	11.3	11.0
14	10.0	9.8	10.6	10.4	12.0	11.1	12.8	12.7	10.2	10.0	11.5	10.5
15	9.9	9.8	10.7	10.5	11.1	10.2	13.0	12.8	10.1	9.4	10.7	8.4
16	9.9	9.6	10.5	10.0	12.0	10.1	13.1	13.0	10.6	9.5	9.2	8.7
17	10.2	9.8	10.0	9.6	12.3	12.1	13.1	12.7	10.7	10.5	9.1	8.7
18	10.3	10.1	9.8	9.7	12.3	12.2	12.8	12.5	10.7	10.4	9.6	9.0
19	10.2	9.8	10.9	10.3	12.3	12.2	12.7	12.4	10.5	10.3	9.8	9.6
20	10.5	9.9	10.9	10.8	12.3	12.2	12.4	11.8	10.6	10.3	10.0	9.8
21	10.6	10.3	10.8	10.6	12.5	12.2	11.9	11.7	13.0	10.5	9.8	9.5
22	10.5	10.2	11.3	10.6	12.7	12.5	11.9	11.6	13.3	13.0	11.4	9.7
23	10.4	10.1	11.5	11.0	13.1	12.8	---	---	13.3	12.9	10.4	9.9
24	10.6	10.2	11.2	11.0	13.1	12.9	---	---	13.2	13.0	10.5	10.2
25	10.5	10.1	11.4	11.1	12.9	12.4	---	---	13.1	12.6	11.2	10.4
26	10.2	9.8	---	---	13.1	12.6	11.0	10.6	12.8	12.5	11.4	11.0
27	9.9	9.2	---	---	13.1	12.9	10.7	10.4	12.6	12.3	11.2	9.2
28	9.3	9.1	---	---	13.3	13.1	10.7	10.0	12.8	12.5	10.0	9.1
29	9.3	9.1	---	---	13.1	13.0	10.1	9.4	---	---	10.8	10.0
30	9.3	9.0	12.1	11.8	13.4	12.9	9.8	9.2	---	---	11.8	10.7
31	9.4	9.1	---	---	13.1	12.9	10.6	9.6	---	---	11.4	10.8
MONTH	10.6	7.9	12.1	7.3	13.4	10.1	14.6	9.2	13.3	9.4	13.5	8.4

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.5	11.0	---	---	8.9	8.0	6.3	5.4	6.9	6.0	---	---
2	11.5	10.6	---	---	8.4	7.5	6.5	5.8	6.8	6.0	---	---
3	11.6	10.7	---	---	7.7	7.0	6.9	6.2	6.5	5.9	---	---
4	11.0	9.4	11.2	10.2	7.3	6.7	7.0	6.6	6.3	5.4	---	---
5	9.3	8.3	10.4	9.3	6.9	6.4	6.8	6.7	6.0	5.5	6.6	6.3
6	8.9	8.3	9.4	9.0	6.5	6.1	6.7	6.4	5.9	5.5	6.6	6.2
7	9.0	8.8	10.5	9.2	7.5	6.1	7.1	6.4	5.7	5.4	7.0	6.2
8	8.8	8.4	10.5	9.7	6.9	6.5	6.9	6.6	7.2	6.7	7.4	6.3
9	8.7	8.2	9.7	8.6	7.1	6.5	6.7	6.2	7.5	6.8	6.5	6.1
10	8.2	7.4	9.1	8.0	7.1	6.7	6.4	5.7	7.0	6.6	6.7	6.1
11	8.9	7.0	9.6	8.5	7.3	6.6	6.3	5.7	6.8	6.4	6.4	6.1
12	8.6	8.2	9.6	8.6	7.0	6.6	6.5	5.5	---	---	6.2	5.7
13	9.0	8.1	8.7	8.0	6.7	6.3	6.7	6.0	---	---	6.8	5.5
14	9.2	8.4	8.0	7.4	7.0	5.8	6.6	6.1	---	---	6.1	5.4
15	9.1	8.7	8.3	7.7	7.2	6.8	6.4	5.5	---	---	6.4	5.6
16	9.4	8.9	8.7	7.7	7.3	6.9	6.2	5.5	---	---	6.1	5.1
17	10.1	8.9	8.5	8.0	7.2	6.6	6.9	5.8	---	---	6.0	5.5
18	10.3	9.6	9.1	8.4	6.8	6.3	6.6	5.6	---	---	6.8	5.6
19	11.0	9.6	9.0	8.4	6.2	5.6	6.7	5.8	---	---	7.7	6.7
20	10.8	10.0	8.9	8.1	6.0	5.0	6.5	5.8	---	---	8.2	6.8
21	10.4	9.5	9.1	8.5	6.4	5.2	6.5	5.6	6.6	6.3	6.9	6.6
22	12.1	10.3	10.2	9.0	6.5	5.6	6.3	5.3	6.2	5.6	6.9	6.4
23	12.8	11.5	9.8	9.1	6.6	5.7	6.0	5.3	6.0	5.4	6.7	6.4
24	12.5	11.3	9.4	8.7	6.7	6.0	5.4	4.9	5.9	5.4	7.2	6.5
25	13.3	11.4	9.3	9.0	6.8	5.9	6.3	4.8	6.1	5.5	7.1	6.2
26	12.7	11.8	9.7	8.7	6.5	6.1	6.7	5.9	6.0	5.6	7.4	6.7
27	12.6	12.0	9.5	8.7	6.0	5.4	6.5	5.9	6.1	5.7	7.0	6.7
28	---	---	9.5	8.6	5.9	5.3	6.4	5.7	6.1	5.7	7.2	6.5
29	---	---	9.3	8.4	6.6	5.3	6.5	5.8	5.9	5.4	7.5	6.7
30	---	---	9.0	8.4	6.2	5.4	6.7	5.9	---	---	7.0	6.7
31	---	---	8.6	7.8	---	---	6.7	6.0	---	---	---	---
MONTH	13.3	7.0	11.2	7.4	8.9	5.0	7.1	4.8	7.5	5.4	8.2	5.1
YEAR	14.6	4.8										

03094000 MAHONING RIVER AT LEAVITTSBURG, OH

LOCATION.--Lat 41°14'21", long 80°52'51", in T.4 N., R.4 W., Trumbull County, Hydrologic Unit 05030103, on right bank at upstream side of Leavitt Road Bridge at Leavittsburg, 300 ft (91 m) downstream from Duck Creek and 1.2 mi (1.9 km) downstream from Eagle Creek.

DRAINAGE AREA.--575 mi² (1,489 km²).

PERIOD OF RECORD.--October 1940 to current year. Prior to June 1941 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 871.25 ft (265.557 m) National Geodetic Vertical Datum of 1912. Prior to July 2, 1941, nonrecording gage, and July 2, 1941, to July 22, 1952, water-stage recorder, at site 50 ft (15 m) downstream at same datum.

REMARKS.--Records good. Flow regulated by Berlin Lake, 25 mi (40 km) upstream, beginning in 1942, by Milton Reservoir, 17 mi (27 km) upstream, and by Michael J. Kirwan Reservoir, 20 mi (32 km) upstream on West Branch, beginning in 1966 (see stations 03090000, 03091000 and 03092450). Diversion upstream from station from Berlin Lake for part of municipal supply of Mahoning Valley Sanitary District (see station 03090500). Water-quality data collected at this site 1943 to 1971.

COOPERATION.--Four discharge measurements furnished by Corps of Engineers.

AVERAGE DISCHARGE.--38 years, 567 ft³/s (16.06 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,300 ft3/s (575 m³/s) Jan. 22, 1959, gage height, 19.37 ft (5.904 m); minimum daily, 60 ft³/s (1.70 m³/s) July 6, 1952.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913 reached a stage of about 24 ft (7 m). Flood of Jan. 25 or 26, 1937 reached a stage of 17.8 ft (5.43 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,910 ft³/s (196 m³/s) Dec. 15, gage height, 13.57 ft (4.136 m); minimum daily, 233 ft³/s (6.60 m³/s) Mar. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	616	520	2650	1350	1000	249	1100	250	955	321	317	382
2	785	517	2390	1330	838	244	1070	259	710	335	307	378
3	746	517	1740	1320	806	250	1310	262	643	683	324	382
4	810	517	1530	1330	795	244	2140	259	398	1080	328	378
5	860	517	1480	1240	751	239	2730	275	363	679	321	394
6	865	523	1400	1210	726	236	2180	310	356	490	345	454
7	860	637	1770	1220	660	233	1770	314	353	679	378	458
8	865	847	1730	1510	615	236	1580	300	366	661	418	458
9	1040	754	1630	1910	574	240	1220	426	430	418	406	458
10	1210	822	1550	1700	556	255	1110	607	378	370	539	466
11	1010	1420	1500	1500	447	297	1060	410	342	331	486	478
12	918	1070	1400	1300	415	450	855	314	331	345	386	490
13	880	844	1500	1200	402	708	553	406	335	342	353	490
14	863	868	2700	1100	320	2110	356	715	310	438	386	490
15	883	946	5420	1000	285	5060	314	800	296	386	398	499
16	887	1300	4250	950	277	3450	296	1590	289	338	398	494
17	863	2070	2590	950	267	1800	286	1530	289	321	394	494
18	879	2150	2240	900	265	1180	279	1500	300	324	398	503
19	878	1580	2270	800	265	950	296	920	353	324	418	508
20	875	1230	2250	680	261	1100	378	647	342	321	422	503
21	865	1170	2260	550	257	1350	466	855	296	321	418	503
22	774	1430	1960	600	252	1530	442	900	272	324	398	499
23	761	1450	1620	550	237	1170	378	875	303	345	386	494
24	758	1380	1560	600	239	707	345	940	314	410	386	494
25	756	1350	1770	750	239	515	324	1430	310	363	374	503
26	741	1330	1840	1600	240	646	307	1160	353	338	386	499
27	581	1330	1600	1500	244	1610	289	1040	474	331	378	482
28	575	1320	1500	1700	244	2080	268	1000	434	331	378	478
29	542	1310	1400	1700	---	1510	259	980	363	338	370	478
30	530	1420	1400	1500	---	1220	253	970	310	335	374	490
31	522	---	1400	1200	---	1120	---	975	---	328	378	---
TOTAL	25018	33139	62300	36750	12477	32989	24214	23219	11568	12950	11948	14077
MEAN	807	1105	2010	1185	446	1064	807	749	386	418	385	469
MAX	1210	2150	5420	1910	1000	5060	2730	1590	955	1080	539	508
MIN	522	517	1400	550	237	233	253	250	272	321	307	378

CAL YR 1977 TOTAL 257676 MEAN 706 MAX 5420 MIN 130
WTR YR 1978 TOTAL 300649 MEAN 824 MAX 5420 MIN 233

03095500 MOSQUITO CREEK BELOW MOSQUITO CREEK DAM, NEAR CORTLAND, OH

LOCATION.--Lat 41°17'59", long 80°45'31", in T.5 N., R.3 W., Trumbull County, Hydrologic Unit 05030103, on right bank 100 ft (30 m) downstream from Mosquito Creek Dam, 0.8 mi (1.3 km) upstream from Confusion Run, and 2.5 mi (4.0 km) southwest of Cortland.

DRAINAGE AREA.--97.5 mi² (253 km²).

PERIOD OF RECORD.--May 1926 to September 1929 (published as "near Cortland"), May 1943 to current year.

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 873.98 ft (266.389 m) Corps of Engineers bench mark. Prior to Aug. 23, 1943, nonrecording gage, and Aug. 23, 1943 to Feb. 14, 1951, water-stage recorder, at site 900 ft (274 m) downstream at datum 6.63 ft (2.021 m) lower.

REMARKS.--Records good. Flow completely regulated by Mosquito Creek Lake beginning 1943 (see station 03095000). Diversion at lake outlet for municipal supply of city of Warren since May 1954; diversion not included in figures of daily discharge. Water-quality data collected at this site 1965 to 1977.

COOPERATION.--Two discharge measurements furnished by Corps of Engineers.

AVERAGE DISCHARGE.--38 years, 86.3 ft³/s (2.444 m³/s) (unadjusted).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,890 ft³/s (53.5 m³/s) Jan. 19, 1929, gage height, 11.5 ft (3.51 m), from floodmark, site and datum then in use; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 542 ft³/s (15.3 m³/s) Dec. 19, 21. gage height, 333 ft (1.015 m); minimum daily, 13 ft³/s)0.37 m³/s) Aug. 19-21, 27-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	52	171	514	14	15	18	19	113	21	91	14
2	58	52	171	514	15	15	17	20	17	21	91	14
3	55	52	171	506	15	16	17	20	18	21	91	14
4	57	52	171	502	15	16	18	20	19	21	91	15
5	55	52	171	496	15	17	17	20	19	21	91	15
6	55	52	171	498	15	15	17	20	19	21	91	15
7	55	52	238	494	15	14	51	19	19	21	91	15
8	55	54	312	502	15	14	130	15	19	21	91	15
9	55	54	316	406	15	14	173	15	20	21	91	15
10	54	54	334	346	15	15	171	18	23	21	91	15
11	54	54	354	346	15	15	171	20	22	57	91	15
12	54	54	354	346	15	14	171	20	21	93	91	15
13	54	54	350	346	15	14	171	20	21	93	91	14
14	54	74	183	244	15	15	171	21	21	91	90	15
15	54	95	93	159	15	15	136	22	21	91	90	15
16	54	95	134	159	15	16	93	22	21	91	71	15
17	54	95	267	159	15	16	93	58	21	91	36	15
18	54	145	370	159	15	17	93	95	21	91	17	15
19	54	173	466	159	15	16	93	136	21	91	13	15
20	54	173	526	159	15	16	93	178	21	91	13	15
21	54	171	526	159	15	17	93	178	21	91	13	15
22	54	171	522	159	15	17	93	178	21	91	14	15
23	54	171	522	161	16	18	93	178	21	91	14	15
24	54	171	522	159	15	18	58	178	21	52	14	15
25	54	171	518	159	15	19	19	178	21	15	14	15
26	54	171	522	161	15	19	19	178	21	52	14	15
27	54	171	526	161	15	19	19	178	21	98	13	15
28	54	168	522	124	15	19	20	178	20	91	13	15
29	54	168	522	81	---	19	19	178	21	91	13	15
30	54	168	518	83	---	19	20	178	21	91	14	15
31	52	---	518	48	---	19	---	178	---	91	14	---
TOTAL	1689	3239	11061	8471	420	508	2367	2736	706	1944	1663	446
MEAN	54.5	108	357	273	15.0	16.4	78.9	88.3	23.5	62.7	53.6	14.9
MAX	58	173	526	514	16	19	173	178	113	98	91	15
MIN	52	52	93	48	14	14	17	15	17	15	13	14
CFSM	.56	1.11	3.66	2.80	.15	.17	.81	.91	.24	.64	.55	.15
IN.	.64	1.24	4.22	3.23	.16	.19	.90	1.04	.27	.74	.63	.17
(+)	22.3	22.3	22.2	22.9	23.8	25.0	24.5	23.9	25.1	25.1	25.8	25.3

CAL YR 1977 TOTAL 29441 MEAN 80.7 MAX 526 MIN 13 CFSM .83 IN 11.23 (+) 22.6
WTR YR 1978 TOTAL 35250 MEAN 96.6 MAX 526 MIN 13 CFSM .99 IN 13.45 (+) 24.0

(+) Diversion in cubic feet per second; furnished by city of Warren.

03098000 MAHONING RIVER AT YOUNGSTOWN, OH

LOCATION.--Lat 41°06'40", long 80°40'23", Mahoning County, Hydrologic Unit 05030103, on left bank 400 ft (122 m) upstream from Bridge Street bridge in Youngstown, and 0.8 mi (1.3 km) upstream from Mill Creek.

DRAINAGE AREA.--898 mi² (2,326 km²).

PERIOD OF RECORD.--October 1921 to current year. Records for May 1903 to July 1906, published in WSP 98, 128, 169, and 295, are unreliable and should not be used.

REVISED RECORDS.--WSP 623: 1924(M). WSP 1907: Drainage area. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 826.53 ft (251.926 m) National Geodetic Vertical Datum of 1912. (levels by Mahoning Valley Sanitary District). Prior to Nov. 16, 1926, nonrecording gage at site 400 ft (122 m) downstream at same datum.

REMARKS.--Records good. Water diverted upstream from station for municipal supply for city of Youngstown. Some sewage returned to river upstream from station. Water also diverted upstream and downstream from station by a private company for industrial use, some of which is returned to river upstream from station. Flow regulated by Berlin Lake, 48 mi (77 km) upstream, beginning in 1942, by Milton Reservoir, 40 mi (64 km) upstream, by Michael J. Kirwan Reservoir, 43 mi (69 km) upstream on West Branch, beginning in 1966, by Mosquito Creek Lake, 22 mi (35 km) upstream, beginning in 1943, by Meander Creek Reservoir, 11 mi (18 km) upstream, beginning in 1929, and by reservoir on Squaw Creek, 5 mi (8 km) upstream. Water-quality data collected at this site 1951, 1965 to 1977.

COOPERATION.--Four discharge measurements furnished by the Corps of Engineers.

AVERAGE DISCHARGE.--57 years, 860 ft³/s (24.36 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,600 ft³/s (498 m³/s) Jan. 25, 1937, gage height, 14.92 ft (4.548 m); maximum gage height, 18.62 ft (5.675 m) Jan. 22, 1959 (backwater from Mill Creek); minimum daily discharge, 30 ft³/s (0.85 m³/s) Aug. 16, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913 reached a stage of 26.5 ft (8.08 m), discharge, 42,500 ft³/s (1,200 m³/s), estimated by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,200 ft³/s (289 m³/s) Dec. 16; maximum gage height, 14.02 ft (4.273 m) Dec. 15 (backwater from Mill Creek); minimum daily discharge, 301 ft³/s (8.52 m³/s) Mar. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1010	630	4320	2180	1310	334	1500	312	1350	383	430	447
2	1230	630	4410	2160	1140	323	1390	306	1060	532	417	437
3	1200	624	3050	2120	1010	334	2050	320	792	1000	522	482
4	1160	624	2500	2120	909	328	3300	315	579	1430	471	450
5	1300	624	2330	2090	881	312	4860	355	434	1120	433	437
6	1180	624	2660	2010	853	306	3940	375	417	640	781	516
7	1120	979	2690	2020	797	301	2970	383	450	733	673	565
8	1180	1220	2610	2640	727	306	2610	382	659	853	754	565
9	1670	1150	2550	3500	685	350	2010	630	634	627	748	555
10	2030	1570	2340	2970	664	496	1750	1020	522	457	1010	595
11	1690	2270	2260	2610	598	624	1930	712	430	393	794	683
12	1360	1910	2210	2210	514	1200	1840	466	437	432	596	651
13	1180	1350	2270	2040	514	1650	1090	754	466	461	503	639
14	1120	1730	5330	1930	454	4350	762	1420	408	527	508	637
15	1110	2020	9900	1820	367	8030	630	1930	376	591	539	788
16	1130	1930	9640	1650	361	7560	546	2940	353	477	541	646
17	1120	3550	5040	1600	361	3730	460	3130	390	444	514	621
18	1110	3800	3740	1570	356	2220	442	2940	416	438	471	639
19	1100	2780	3560	1370	345	1690	496	2220	753	441	471	687
20	1090	2060	3620	1060	339	1820	657	1360	552	438	481	654
21	1090	2040	3670	937	339	2220	804	1480	428	442	472	661
22	1000	2280	3310	958	334	2490	790	1510	368	446	465	647
23	937	2320	2750	895	317	2080	650	1400	352	618	442	620
24	937	2130	2560	937	312	1250	572	1600	363	679	438	687
25	937	2000	2850	1170	312	888	487	2170	360	493	432	604
26	930	1960	2840	2250	317	1060	414	1950	682	400	436	605
27	797	1920	2570	2010	312	2860	384	1580	833	437	429	589
28	692	1890	2240	2240	323	3380	354	1440	714	488	433	574
29	685	1840	2280	2210	---	2440	331	1380	543	463	437	571
30	664	2220	2250	1900	---	1810	314	1360	421	444	437	628
31	630	---	2210	1560	---	1540	---	1370	---	433	460	---
TOTAL	34389	52675	106560	58737	15751	58282	40333	39710	16542	17760	16538	17800
MEAN	1109	1756	3437	1895	563	1880	1344	1281	551	573	533	593
MAX	2030	3800	9900	3500	1310	8030	4860	3130	1350	1430	1010	788
MIN	630	624	2210	895	312	301	314	306	352	383	417	437

CAL YR 1977 TOTAL 419295 MEAN 1149 MAX 9900 MIN 200
WTR YR 1978 TOTAL 475077 MEAN 1302 MAX 9900 MIN 301

03099500 MAHONING RIVER AT LOWELLVILLE, OH

LOCATION.--Lat 41°02'12", long 80°32'11", in T.1 N., R.1 W., Mahoning County, Hydrologic Unit 05030103, on left bank 100 ft (30 m) upstream from First Street Bridge at Lowellville, 1 mi (2 km) upstream from Ohio-Pennsylvania State line, and 3 mi (5 km) downstream from Yellow Creek.

DRAINAGE AREA.--1,073 mi² (2,779 km²).

PERIOD OF RECORD.--October 1942 to current year. Prior to August 1943 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1555: 1946(M), 1952(M), 1955(M), 1956. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 796.84 ft (242.877 m) National Geodetic Vertical Datum of 1912. Prior to Oct. 26, 1948, nonrecording gage at site 300 ft (91 m) downstream at same datum.

REMARKS.--Records good. Flow regulated by 5 flood control reservoirs at points 21 mi (34 km) to 58 mi (93 km) upstream (see REMARKS for station 03098000), and by reservoirs on Squaw Creek, 15 mi (24 km) upstream, on Dry Run, 9 mi (14 km) upstream, and on Yellow Creek, 5 mi (8 km) upstream. Water-quality data collected at this site 1949 to 1971.

AVERAGE DISCHARGE.--36 years, 1,081 ft³/s (30.61 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 21,000 ft³/s (595 m³/s) Jan. 21, 1959, gage height, 14.43 ft (4.398 m); minimum daily, 155 ft³/s (4.39 m³/s) Feb. 5, 1948.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 17.8 ft (5.43 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12,600 ft³/s (357 m³/s) Dec. 15, gage height, 10.64 ft (3.243 m); minimum daily, 367 ft³/s (10.4 m³/s) Mar. 5-8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1490	776	5000	2310	1820	409	2180	479	1540	540	508	652
2	1890	776	5300	2270	1610	444	2030	479	1340	813	500	524
3	1910	767	3500	2220	1430	532	2610	479	1140	1470	786	612
4	1790	758	3000	2190	1340	381	3910	472	900	1650	612	564
5	1570	749	2800	2200	1260	367	4980	524	644	1440	508	540
6	1650	749	3100	2150	1180	367	4400	500	612	1020	1370	586
7	1570	1300	3200	2140	1100	367	3940	1090	636	813	1080	687
8	1720	1620	3100	2720	1000	367	3500	1310	1280	960	1380	732
9	2750	1390	3000	3740	920	409	2970	960	1650	822	910	644
10	2760	1950	2800	3250	950	604	2630	2700	1050	572	1540	604
11	2260	2840	2700	2850	831	920	2490	1500	1000	508	1100	741
12	1850	2580	2700	2400	687	1780	2590	700	696	493	840	714
13	1610	2130	3350	2190	628	2420	2020	1400	1090	548	732	660
14	1490	2090	8330	2080	604	5550	1610	2100	880	604	678	687
15	1560	2510	12200	1990	500	9210	1350	3000	556	705	660	1000
16	1650	2210	9770	1820	444	7910	1170	4100	620	572	644	687
17	1560	3800	5090	1760	437	4170	990	4230	777	516	636	636
18	1470	4280	3920	1850	416	2830	950	4370	669	493	636	652
19	1420	3470	3780	1790	395	2480	1130	3320	1520	493	588	750
20	1360	2730	3880	1570	381	2550	1020	1770	1100	493	572	678
21	1330	2730	3910	1280	388	2780	1070	1930	890	493	540	678
22	1240	3070	3530	1360	381	3050	1060	1940	705	493	548	696
23	1110	3010	3040	1130	381	2830	900	1760	705	777	516	644
24	1070	2760	2810	1080	381	2140	804	2060	678	880	500	620
25	1090	2520	3080	1670	381	1750	705	2420	660	604	500	620
26	1090	2410	3810	2890	409	1950	596	2400	1120	508	516	612
27	1030	2310	2760	2790	402	3250	540	2010	1530	556	588	604
28	870	2230	2440	2740	402	3820	493	1820	1260	604	500	588
29	850	2300	2410	2650	---	3240	472	1750	990	548	524	580
30	830	2700	2370	2460	---	2630	472	1720	612	516	572	628
31	794	---	2350	1990	---	2290	---	1710	---	524	660	---
TOTAL	46634	65515	122230	67530	21058	73797	55582	57003	28850	22028	22244	19622
MEAN	1504	2184	3943	2178	752	2381	1853	1839	962	711	718	654
MAX	2760	4280	12200	3740	1820	9210	4980	4370	1650	1650	1540	1000
MIN	794	749	2350	1080	381	367	472	472	556	493	500	524

CAL YR 1977 TOTAL 555746 MEAN 1523 MAX 12200 MIN 305
WTR YR 1978 TOTAL 602093 MEAN 1650 MAX 12200 MIN 367

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OH

LOCATION.--Lat 41°01'53", long 80°31'10", Mahoning County, Hydrologic Unit 05030103, on left bank 800 ft (244 m) upstream from Ohio-Pennsylvania State line, just below Lowellville, 0.9 mi (1.4 km) downstream from gaging station at Lowellville, and 3.9 mi (6.3 km) downstream from Yellow Creek.

DRAINAGE AREA.--1,075 mi² (2,784 km²).

PERIOD OF RECORD.--January 1967 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1967 to current year.
pH: January 1967 to current year.
WATER TEMPERATURES: January 1967 to current year.
DISSOLVED OXYGEN: January 1967 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. See records of daily discharge for gaging station at Lowellville (station 03099500).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,500 micromhos Feb. 11-13, 1977; minimum, 204 micromhos July 13, 1976.
pH: Maximum, 9.9 units Jan. 26, 1969; minimum, 3.0 units Jan. 24, 1967.
WATER TEMPERATURES: Maximum, 39.0°C June 29, 1971; minimum, 0.5°C Jan. 10, 1978.
DISSOLVED OXYGEN: Maximum, 14.2 mg/L Mar. 25, 1970; minimum, 0.0 mg/L June 1, 1975, June 17, 1977.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,030 micromhos Mar. 4; minimum, 299 micromhos Dec. 16.
pH: Maximum, 8.2 units Dec. 17, Mar. 14, 15; minimum, 6.8 units Oct. 7.
WATER TEMPERATURES: Maximum, 34.5°C July 22, 23; minimum, 0.5°C Jan. 10.
DISSOLVED OXYGEN: Maximum, 12.9 mg/L Dec. 11; minimum, 2.4 mg/L Aug. 29.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	650	491	650	621	576	509	510	450	569	533	909	836
2	555	534	654	635	498	428	498	464	591	555	882	837
3	555	539	666	633	474	411	468	450	597	564	881	842
4	582	542	669	641	510	440	479	443	614	584	1030	887
5	578	545	659	641	680	509	476	459	623	588	911	846
6	584	546	653	629	642	578	482	464	636	599	894	846
7	591	567	638	569	581	527	471	450	642	609	903	854
8	590	561	596	573	533	512	527	453	672	624	894	839
9	572	500	627	599	528	509	519	465	683	654	914	863
10	588	536	624	513	518	506	455	434	723	681	936	881
11	588	552	551	516	521	504	450	420	735	693	987	846
12	591	561	561	491	533	506	474	434	749	716	879	777
13	591	563	576	503	732	525	500	452	744	716	791	663
14	611	569	584	540	711	474	506	476	---	---	663	458
15	605	581	558	533	464	347	492	470	---	---	1010	384
16	594	578	588	543	341	299	509	473	828	803	1000	603
17	599	564	536	470	411	338	527	501	923	812	665	539
18	617	579	707	440	450	416	561	524	893	846	540	396
19	615	579	617	420	456	444	552	531	872	837	459	419
20	609	588	440	426	455	441	584	542	870	830	491	450
21	621	597	---	---	450	438	599	572	849	825	468	426
22	623	593	---	---	449	429	597	570	---	---	435	398
23	621	603	530	500	470	444	582	564	---	---	416	386
24	623	599	534	509	477	461	606	563	849	822	462	407
25	642	599	525	503	531	461	965	620	864	827	512	452
26	641	614	581	510	465	443	989	734	891	828	540	510
27	644	617	564	525	458	431	732	636	861	837	546	473
28	659	633	594	537	473	446	639	558	888	833	473	398
29	651	635	593	552	476	453	561	519	---	---	443	386
30	648	627	659	560	474	459	528	507	---	---	501	437
31	650	620	---	---	470	453	540	512	---	---	528	491
MONTH	659	491	707	420	732	299	989	420	923	533	1030	384

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	542	513	732	694	510	480	701	668	633	615	675	623
2	528	501	738	703	515	483	672	546	657	614	671	647
3	---	---	734	696	572	519	581	527	671	429	669	570
4	---	---	731	687	582	548	567	531	668	489	648	567
5	---	---	723	689	623	584	542	503	660	612	665	621
6	---	---	729	692	653	618	569	506	656	426	656	627
7	---	---	713	681	677	612	626	567	591	558	660	626
8	---	---	716	677	642	510	603	566	578	473	654	626
9	---	---	675	506	599	440	588	563	645	585	657	626
10	---	---	633	563	624	591	632	584	570	477	636	614
11	---	---	611	557	662	609	644	620	623	540	624	594
12	---	---	623	590	671	629	663	645	638	612	639	575
13	---	---	639	530	623	573	689	648	639	618	618	575
14	---	---	570	534	638	611	687	633	630	597	633	588
15	---	---	540	458	672	635	638	605	632	608	618	482
16	---	---	461	423	690	654	633	590	636	606	624	603
17	---	---	419	399	689	650	639	599	633	609	627	597
18	669	642	419	404	693	629	629	591	647	618	648	614
19	675	624	444	401	614	518	647	599	657	623	642	576
20	657	609	483	438	603	564	674	620	653	612	653	614
21	638	592	488	458	668	597	677	630	656	618	663	620
22	605	581	495	449	687	636	678	612	644	621	632	602
23	608	586	510	477	720	674	654	459	671	630	647	609
24	621	594	507	480	713	675	587	470	672	636	642	623
25	634	604	501	473	722	681	579	516	684	638	645	608
26	668	639	485	455	713	407	636	578	674	654	633	614
27	699	651	497	455	555	435	656	596	684	651	644	609
28	719	690	503	470	612	477	642	567	672	645	647	627
29	743	692	500	476	641	609	663	635	678	650	642	611
30	736	694	522	432	660	627	639	606	689	650	651	623
31	---	---	504	446	---	---	648	611	678	602	---	---
MONTH	743	501	738	399	722	407	701	459	689	426	675	482
YEAR	1030	299										

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OH--Continued

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.3	7.1	7.5	7.4	7.9	7.5	7.7	7.6	7.6	7.3	7.8	7.6
2	7.5	7.2	7.4	7.3	7.9	7.6	7.8	7.6	7.7	7.2	7.8	7.4
3	7.6	7.3	7.3	7.2	7.7	7.6	7.8	7.5	7.7	7.4	7.6	7.4
4	7.6	7.2	7.3	7.2	7.8	7.7	7.8	7.4	7.7	7.3	7.7	7.5
5	7.4	7.2	7.4	7.2	7.9	7.6	7.4	7.1	7.8	7.6	7.6	7.5
6	7.4	7.2	7.4	7.3	7.9	7.7	7.6	7.3	7.8	7.7	7.9	7.6
7	7.3	6.8	7.5	7.2	7.8	7.7	7.7	7.5	7.8	7.5	7.9	7.7
8	7.9	7.0	7.4	7.3	7.7	7.6	7.8	7.5	7.8	7.6	7.8	7.7
9	7.6	7.3	7.4	7.3	7.8	7.5	7.8	7.6	7.8	7.5	7.7	7.5
10	7.7	7.5	7.4	7.2	7.7	7.6	7.7	7.4	7.7	7.5	7.7	7.5
11	7.6	7.4	7.5	7.3	7.8	7.6	7.5	6.9	7.6	7.5	7.9	7.6
12	7.6	7.4	7.6	7.4	7.8	7.4	7.6	7.2	7.9	7.5	7.9	7.8
13	7.5	7.3	7.5	7.3	7.8	7.3	7.6	7.4	7.9	7.9	8.1	7.9
14	7.4	7.2	7.5	7.3	7.9	7.7	7.6	7.4	---	---	8.2	7.7
15	7.4	7.2	7.6	7.3	8.1	7.7	7.7	7.5	---	---	8.2	7.6
16	7.6	7.4	7.8	7.7	7.7	7.3	7.7	7.4	7.6	7.6	7.6	7.3
17	7.6	7.4	8.0	7.8	8.2	7.5	7.6	7.3	7.6	7.5	7.9	7.5
18	7.6	7.3	8.0	7.8	8.0	7.9	7.6	7.3	7.6	7.3	8.0	7.8
19	7.5	7.2	7.8	7.6	7.9	7.7	7.5	7.2	7.5	7.4	7.9	7.7
20	7.3	7.1	---	---	7.8	7.6	7.6	7.3	7.5	7.4	7.9	7.6
21	7.5	7.2	---	---	7.8	7.6	7.8	7.4	7.6	7.5	7.8	7.7
22	7.5	7.3	---	---	7.8	7.6	7.7	7.4	---	---	7.9	7.6
23	7.6	7.4	7.8	7.5	7.8	7.5	7.9	7.5	---	---	7.9	7.6
24	7.5	7.5	7.8	7.6	7.7	7.3	7.8	7.4	7.6	7.3	8.0	7.6
25	7.5	7.3	7.9	7.8	7.8	7.7	7.7	7.5	7.6	7.4	7.8	7.6
26	7.4	7.2	7.9	7.7	7.[illegible]	7.7	7.9	7.6	7.7	7.6	7.9	7.7
27	7.5	7.3	7.9	7.8	7.7	7.6	7.9	7.5	7.8	7.7	8.1	7.8
28	7.4	7.2	7.9	7.3	7.7	7.5	7.8	7.6	7.8	7.7	7.9	7.6
29	7.5	7.3	7.8	7.5	7.6	7.4	7.7	7.5	---	---	7.8	7.3
30	7.5	7.4	8.0	7.5	7.6	7.5	7.7	7.5	---	---	7.8	7.6
31	7.5	7.3	---	---	7.7	7.4	7.7	7.4	---	---	7.8	7.6
MONTH	7.9	6.8	8.0	7.2	8.2	7.3	7.9	6.9	7.9	7.2	8.2	7.3

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.8	7.6	7.3	7.2	7.3	7.0	7.4	7.3	7.3	7.3	7.4	7.3
2	7.9	7.8	7.3	7.2	7.2	7.0	7.5	7.3	7.3	7.2	7.4	7.2
3	7.9	7.6	7.3	7.2	7.2	7.1	7.7	7.5	7.3	7.2	7.3	7.2
4	7.7	7.2	7.3	7.2	7.4	7.1	7.6	7.5	7.4	7.2	---	---
5	7.7	7.3	7.3	7.2	7.4	7.3	7.6	7.4	7.4	7.2	---	---
6	7.4	7.3	7.3	7.1	7.4	7.2	7.5	7.3	7.4	7.1	---	---
7	7.6	7.2	7.3	7.1	7.3	7.1	7.4	7.3	---	---	---	---
8	7.6	7.4	7.2	7.0	7.3	7.2	7.5	7.3	---	---	---	---
9	7.6	7.5	7.7	7.1	7.5	7.4	7.5	7.4	---	---	---	---
10	7.6	6.9	7.5	7.1	7.6	7.3	7.5	7.5	---	---	---	---
11	7.5	7.3	7.4	7.2	7.4	7.2	7.6	7.5	---	---	---	---
12	7.7	7.4	7.3	7.2	7.3	7.1	7.6	7.4	---	---	---	---
13	7.5	7.2	7.3	7.1	7.5	7.2	7.5	7.4	---	---	---	---
14	7.3	7.1	7.5	7.3	7.5	7.3	7.5	7.3	---	---	---	---
15	7.4	7.2	7.6	7.4	7.4	7.3	7.4	7.3	---	---	---	---
16	7.7	7.3	7.6	7.3	7.4	7.3	7.5	7.4	---	---	---	---
17	7.4	7.3	7.7	7.4	7.4	7.2	7.5	7.4	---	---	---	---
18	7.3	7.2	7.6	7.3	7.3	7.1	7.5	7.3	---	---	7.4	7.3
19	7.3	7.1	7.5	6.9	7.5	7.3	7.5	7.3	---	---	7.3	7.2
20	7.3	7.1	7.6	7.2	7.4	7.1	7.5	7.4	---	---	7.3	7.2
21	7.3	7.2	7.5	7.3	7.3	7.2	7.5	7.3	7.3	7.1	7.3	7.2
22	7.4	7.2	7.5	7.1	7.4	7.3	7.4	7.3	7.3	7.1	7.5	7.3
23	7.6	7.4	7.5	7.2	7.4	7.3	7.4	7.1	7.2	7.1	7.5	7.2
24	7.5	7.3	7.4	7.3	7.4	7.3	7.3	7.2	7.2	7.1	7.4	7.3
25	7.4	7.3	7.5	7.3	7.4	7.3	7.2	7.0	7.2	7.0	7.5	7.4
26	7.2	7.1	7.5	7.1	7.5	7.0	7.2	7.1	7.2	7.1	7.5	7.4
27	7.2	7.0	7.4	7.1	7.5	7.2	7.3	7.2	7.2	7.2	7.4	7.3
28	7.2	7.0	7.3	7.1	7.5	7.3	7.3	7.2	7.3	7.2	7.5	7.3
29	7.3	7.1	7.4	7.1	7.4	7.3	7.3	7.3	7.3	7.1	7.5	7.4
30	7.3	7.1	7.3	6.9	7.4	7.3	7.3	7.3	7.3	7.1	7.5	7.3
31	---	---	7.3	7.1	---	---	7.4	7.3	7.3	7.2	---	---
MONTH	7.9	6.9	7.7	6.9	7.6	7.0	7.7	7.0	7.4	7.0	7.5	7.2
YEAR	8.2	6.8										

BEAVER RIVER BASIN

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	22.5	20.5	19.5	17.5	7.0	6.5	3.5	3.0	4.0	3.0	11.5	10.5
2	20.5	19.5	21.0	18.0	6.5	6.0	3.0	2.0	4.5	3.5	11.0	9.5
3	19.5	18.0	21.5	20.5	6.5	6.0	2.5	1.5	4.0	3.0	11.5	11.0
4	19.5	17.5	22.5	21.0	6.5	5.5	3.5	2.5	4.0	2.5	11.0	10.0
5	19.5	18.0	23.5	22.5	5.5	4.5	4.5	3.5	4.0	3.0	11.0	9.5
6	20.0	18.5	23.0	22.0	4.5	4.0	5.0	4.5	4.0	3.0	11.0	10.0
7	20.5	18.5	22.0	19.5	4.0	2.5	5.0	5.0	4.5	2.5	12.5	10.5
8	19.5	17.5	19.5	18.5	3.0	2.0	5.0	3.5	5.5	3.5	13.5	11.5
9	17.5	14.5	19.0	18.5	2.5	1.5	3.0	1.5	6.5	5.0	14.0	12.0
10	15.5	14.5	19.0	15.0	1.5	1.0	1.5	.5	7.0	5.5	14.0	12.0
11	16.5	15.0	15.0	13.0	2.0	1.0	2.0	1.5	7.0	6.0	12.0	10.5
12	16.0	15.0	12.5	10.0	2.5	1.0	3.0	2.0	7.5	6.0	10.5	6.0
13	15.5	15.0	10.5	9.5	3.5	2.5	3.5	3.0	7.0	6.5	5.5	4.5
14	15.5	14.5	10.5	9.5	3.0	2.0	3.5	3.0	---	---	4.5	2.5
15	15.5	14.5	10.5	9.5	2.0	1.5	3.5	3.0	---	---	2.5	2.0
16	14.5	13.5	11.5	10.5	2.0	1.5	4.0	2.5	9.5	9.5	2.5	1.5
17	14.0	13.0	10.5	9.0	3.0	2.0	4.0	3.5	11.0	9.0	3.5	2.5
18	15.5	13.5	9.0	8.0	4.0	3.0	4.5	3.5	9.5	8.0	4.5	3.5
19	15.5	15.5	8.5	7.5	4.5	4.0	4.5	3.5	8.5	7.0	6.5	4.0
20	16.0	15.5	---	---	4.5	4.0	4.5	3.5	7.5	6.0	7.0	5.5
21	16.0	15.0	---	---	4.5	3.5	5.0	4.0	8.0	6.5	7.0	6.0
22	16.0	15.5	---	---	3.5	3.5	5.0	4.5	---	---	7.0	5.5
23	16.0	15.5	9.5	9.0	3.5	3.0	4.0	2.5	---	---	8.0	7.0
24	17.0	15.5	9.0	8.5	4.5	3.5	6.0	3.5	11.0	10.5	9.5	7.5
25	18.0	16.0	8.5	8.0	4.5	2.5	6.0	5.0	12.0	10.5	9.0	8.5
26	19.5	17.5	8.0	7.0	2.5	1.5	5.5	2.0	11.5	10.0	9.0	8.0
27	21.5	18.5	7.0	6.0	2.0	1.0	2.0	1.0	10.0	9.5	8.0	6.0
28	21.5	20.0	6.0	5.5	2.0	1.5	2.0	2.0	11.0	9.0	7.0	5.5
29	21.0	19.5	7.5	6.5	3.0	2.0	2.5	2.0	---	---	7.5	6.5
30	19.5	17.5	8.0	7.0	3.5	3.0	3.0	2.0	---	---	9.0	7.0
31	18.5	17.0	---	---	4.0	3.5	3.0	2.5	---	---	10.0	8.5
MONTH	22.5	13.0	23.5	5.5	7.0	1.0	6.0	.5	12.0	2.5	14.0	1.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	12.0	9.0	22.0	20.5	26.5	24.0	29.0	28.0	30.5	28.5	31.0	28.5
2	11.0	9.5	23.0	20.0	27.0	25.0	28.0	24.0	31.5	29.0	31.0	28.5
3	10.0	9.0	23.5	21.0	26.5	25.5	24.0	23.0	31.5	27.0	30.0	28.0
4	10.0	8.5	22.0	21.0	26.5	25.0	23.0	21.5	30.5	27.5	28.5	27.5
5	10.5	9.5	21.0	19.5	27.0	25.0	23.5	20.5	30.0	28.0	29.0	27.0
6	11.0	10.0	21.0	20.0	28.5	24.5	26.0	22.0	29.0	24.5	31.0	28.0
7	12.0	10.5	22.0	19.0	27.5	25.5	28.5	25.5	26.5	25.5	32.5	30.5
8	11.5	10.5	21.0	20.0	26.0	22.5	28.5	27.5	26.5	24.5	32.5	31.5
9	11.5	10.5	20.0	17.0	23.5	20.5	27.5	26.0	28.5	26.5	32.5	31.5
10	13.0	10.0	18.5	17.5	26.0	22.0	27.0	26.0	27.0	25.0	32.5	30.5
11	14.5	13.0	21.0	18.0	27.5	24.0	28.5	25.5	27.0	25.5	31.0	29.5
12	14.5	12.0	21.5	20.5	28.5	26.0	29.0	26.5	28.5	26.0	31.5	30.0
13	16.5	14.0	21.5	19.0	27.0	23.5	29.5	27.0	29.5	27.0	30.0	28.5
14	16.5	15.0	19.5	17.0	25.5	23.5	28.5	27.5	30.0	27.5	29.0	28.0
15	17.0	15.5	17.0	15.5	26.5	24.0	30.5	28.0	32.0	29.5	28.5	26.0
16	17.0	15.0	16.0	15.0	27.5	25.5	30.0	28.5	32.5	31.0	29.5	28.0
17	18.0	15.0	16.0	15.0	29.5	27.0	29.5	27.0	32.5	31.0	28.5	27.5
18	17.0	16.0	17.0	15.0	30.0	27.5	30.5	27.5	33.0	30.5	29.5	28.0
19	18.0	16.0	20.0	16.5	27.0	23.5	31.5	29.0	33.5	31.5	31.5	28.5
20	17.5	15.5	23.0	19.0	28.0	25.5	33.5	29.5	32.5	31.0	32.0	30.5
21	16.0	15.0	22.5	21.0	29.5	27.5	33.5	31.0	32.0	29.5	32.0	30.0
22	16.5	14.0	21.5	20.0	30.0	28.0	34.5	32.0	32.0	29.0	30.0	28.0
23	15.5	13.5	21.0	20.0	30.5	28.0	34.5	28.0	32.5	30.5	28.5	27.0
24	16.5	14.5	20.5	20.0	31.5	28.5	30.0	28.0	32.5	31.0	28.5	26.5
25	18.0	15.5	22.0	20.0	32.0	29.0	29.0	27.5	33.5	31.0	28.0	26.0
26	19.5	17.0	23.0	20.5	31.0	24.0	30.5	28.5	32.5	31.0	27.5	25.5
27	21.5	18.5	25.0	22.0	27.5	24.5	30.5	28.5	32.0	31.0	27.5	25.5
28	22.5	19.5	26.0	22.5	28.5	26.0	29.5	27.0	32.5	30.5	27.0	25.5
29	23.5	20.5	26.5	23.0	29.5	27.0	29.5	28.0	33.0	31.5	26.0	23.5
30	24.0	21.5	26.0	24.0	30.5	28.5	29.5	28.0	32.0	30.5	27.0	25.0
31	---	---	26.0	24.0	---	---	29.5	28.0	30.5	29.0	---	---
MONTH	24.0	8.5	26.5	15.0	32.0	20.5	34.5	20.5	33.5	24.5	32.5	23.5
YEAR	34.5	.5										

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OH--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	6.9	5.5	5.9	5.5	10.0	9.5	12.3	11.7	---	---	7.5	7.1
2	7.7	6.7	5.6	4.9	10.2	9.5	12.2	11.6	12.0	11.4	7.7	6.9
3	7.6	7.1	4.7	4.2	11.1	9.7	11.8	11.3	11.4	11.1	7.1	6.5
4	7.6	7.0	4.8	4.1	11.1	9.7	12.1	11.3	11.3	10.8	7.0	6.8
5	7.0	6.2	4.6	4.3	10.2	9.0	11.6	11.3	---	---	7.5	7.0
6	6.2	5.6	5.0	3.9	10.2	9.2	11.8	11.3	---	---	7.3	6.6
7	6.3	5.4	5.8	3.4	11.8	10.3	12.0	10.0	12.3	11.3	6.8	6.3
8	6.3	5.7	6.0	4.8	12.0	10.4	10.1	8.6	12.5	11.8	7.3	5.9
9	6.9	6.0	6.5	5.4	12.2	11.3	10.3	9.3	12.0	11.3	7.4	6.5
10	7.7	6.5	7.0	5.5	12.8	12.2	11.1	10.3	11.2	10.7	8.1	6.6
11	7.5	7.0	8.0	7.1	12.9	12.8	10.8	10.2	10.9	10.5	9.1	7.7
12	7.5	6.8	9.2	8.1	---	---	11.0	10.2	10.7	10.4	10.8	8.6
13	7.3	6.8	9.4	9.0	---	---	10.4	9.7	10.5	10.1	11.7	11.0
14	7.1	6.7	9.2	9.0	11.7	11.3	9.9	9.3	---	---	11.4	10.9
15	6.9	6.2	9.0	8.8	11.5	11.1	9.9	9.6	---	---	11.5	11.4
16	7.1	6.6	9.6	8.3	11.5	11.0	10.1	9.7	---	---	11.5	11.5
17	7.4	6.8	8.6	8.0	11.7	11.4	9.9	9.4	---	---	11.7	11.4
18	6.9	6.2	8.9	8.1	12.3	11.6	10.4	9.6	---	---	11.8	11.5
19	6.6	5.8	9.5	8.8	12.2	11.9	---	---	---	---	11.5	11.3
20	6.5	5.6	---	---	12.4	11.8	---	---	---	---	11.5	11.1
21	7.7	5.9	---	---	12.1	11.8	---	---	---	---	11.1	10.9
22	7.5	6.8	---	---	12.2	11.3	---	---	---	---	12.6	11.1
23	7.1	6.5	10.4	8.9	12.1	11.8	---	---	---	---	12.8	12.3
24	6.7	5.8	10.6	10.0	11.8	11.6	---	---	7.8	7.4	12.3	11.6
25	6.1	5.2	10.7	10.3	11.9	11.4	---	---	7.7	6.9	12.2	11.4
26	5.4	4.6	10.7	10.4	12.3	11.9	---	---	8.0	7.1	11.7	11.1
27	5.9	4.4	11.1	10.7	12.5	12.3	---	---	8.1	7.6	11.5	11.0
28	5.4	4.7	10.5	10.2	12.7	12.3	---	---	8.0	6.9	11.6	11.2
29	5.9	4.5	10.4	10.0	12.5	11.6	---	---	---	---	11.1	10.8
30	6.0	5.2	10.1	9.7	12.2	10.4	---	---	---	---	10.8	10.7
31	6.2	5.8	---	---	11.9	11.6	---	---	---	---	10.9	10.3
MONTH	7.7	4.4	11.1	3.4	12.9	9.0	12.3	8.6	12.5	6.9	12.8	5.9

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.6	9.8	4.7	4.1	6.0	5.1	3.9	3.0	---	---	3.9	3.2
2	10.2	9.9	4.7	3.9	5.8	4.9	4.8	3.3	---	---	4.2	3.3
3	10.9	10.0	4.4	4.0	5.4	4.5	6.2	4.3	---	---	3.6	2.7
4	11.4	10.5	4.7	4.0	5.1	4.6	6.5	5.3	---	---	4.2	3.0
5	10.9	10.4	4.8	3.8	4.8	4.1	7.0	5.6	---	---	4.0	3.0
6	10.5	10.3	5.2	4.3	4.0	3.4	5.5	4.5	---	---	3.5	2.9
7	11.0	10.3	5.1	4.6	4.5	3.2	4.8	3.9	5.1	4.2	3.5	2.7
8	10.6	10.3	5.1	4.6	5.9	3.8	5.1	3.9	6.0	4.3	3.7	2.8
9	10.9	10.3	7.4	3.7	7.1	5.9	5.0	3.8	4.6	3.8	3.8	2.9
10	10.8	9.8	7.6	6.8	6.0	5.1	4.4	3.8	5.8	3.6	3.7	2.9
11	10.3	9.3	7.1	6.0	5.3	4.6	4.4	3.7	5.4	4.5	4.1	2.7
12	10.5	9.7	5.9	5.2	4.7	3.9	4.2	3.5	4.9	4.2	3.4	2.9
13	9.8	8.7	6.2	4.2	5.4	3.2	4.5	3.6	4.1	3.7	3.8	3.0
14	9.4	8.6	7.2	6.1	4.9	4.3	4.4	3.6	4.1	3.5	3.8	2.7
15	9.1	8.2	7.6	6.7	4.5	3.8	4.4	3.5	3.8	2.9	4.1	2.8
16	9.4	8.4	8.5	6.7	---	---	4.4	3.2	3.5	2.8	4.9	4.1
17	8.5	7.7	8.8	8.2	---	---	4.2	3.5	3.7	2.8	4.3	3.9
18	7.6	7.1	8.9	8.3	---	---	4.0	3.3	3.7	2.9	4.1	3.2
19	7.1	6.4	8.4	7.7	---	---	3.9	3.0	3.6	2.6	3.5	2.9
20	7.8	6.4	8.1	6.6	---	---	---	---	3.7	2.8	3.5	2.9
21	8.1	7.5	7.3	6.2	---	---	---	---	4.5	3.2	3.5	2.8
22	8.5	7.8	7.1	6.4	---	---	---	---	4.2	3.3	3.7	3.0
23	8.5	8.1	6.8	6.2	---	---	---	---	4.0	3.3	4.2	3.5
24	8.3	7.4	6.7	6.0	---	---	4.4	3.9	3.7	3.0	3.9	3.4
25	7.3	6.5	6.9	6.4	---	---	4.5	3.6	3.5	2.9	3.9	3.5
26	6.4	5.6	6.8	6.2	---	---	4.0	3.1	3.5	2.8	4.1	3.3
27	5.6	4.8	6.5	5.8	---	---	---	---	3.8	2.9	4.0	3.5
28	4.9	4.3	6.2	5.5	---	---	---	---	3.3	2.9	4.1	3.4
29	4.9	4.2	6.0	5.3	---	---	---	---	3.5	2.4	4.2	3.5
30	4.3	3.8	6.4	5.0	4.0	3.5	---	---	3.6	2.9	4.2	3.4
31	---	---	6.3	5.4	---	---	---	---	3.6	3.1	---	---
MONTH	11.4	3.8	8.9	3.7	7.1	3.2	7.0	3.0	6.0	2.4	4.9	2.7
YEAR	12.9	2.4										

03102950 PYMATUNING CREEK AT KINSMAN, OH

LOCATION.--Lat 41°26'34", long 80°35'18", in T.7 N., R.1 W., Trumbull County, Hydrologic Unit 05030102, on left bank at downstream side of bridge on State Highway 7 at Kinsman, 0.8 mi (1.3 km) downstream from Sugar Creek, and 1.2 mi (1.9 km) upstream from Stratton Creek.

DRAINAGE AREA.--96.7 mi² (250 km²).

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 906.8 ft (276.39 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Water-quality data collected at this site 1966 to 1977.

AVERAGE DISCHARGE.--13 years, 120 ft³/s (3.398 m³/s), 16.85 in/yr (428 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,420 ft³/s (68.5 m³/s) Feb. 17, 1976, gage height, 12.27 ft (3.740 m) from rating curve extended above 800 ft³/s (22.7 m³/s); minimum discharge, 0.10 ft³/s (0.003 m³/s) Aug. 8, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s (19.8 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 18	1400	732	20.7	10.18	3.103	Mar. 16	0100	1690	47.9	11.71	3.569
Dec. 16	0100	*2020	57.2	*12.02	3.664						

Minimum daily discharge, 1.9 ft³/s (0.054 m³/s) July 11, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	12	339	63	368	44	173	19	36	2.0	7.2	5.4
2	76	12	423	56	304	44	144	16	28	2.3	5.6	5.6
3	64	13	413	50	237	43	173	14	18	5.7	6.0	7.4
4	76	14	374	49	189	43	327	12	11	6.9	7.1	9.8
5	81	14	293	46	152	43	532	20	8.1	5.4	7.1	9.8
6	80	12	222	45	126	43	568	35	5.4	3.7	6.4	9.3
7	64	27	170	48	110	43	568	48	4.3	2.6	6.4	7.1
8	49	60	150	124	97	46	442	49	5.1	2.2	9.1	5.3
9	76	72	133	304	88	50	304	106	8.6	3.8	8.6	4.3
10	139	92	120	339	80	58	208	157	6.9	2.6	37	3.5
11	170	189	120	382	73	67	147	135	5.7	1.9	59	3.0
12	221	207	119	394	67	85	125	107	5.3	1.9	55	2.6
13	243	241	115	330	64	136	108	112	8.6	2.4	38	2.6
14	209	279	508	269	62	412	92	235	15	2.7	26	2.5
15	158	276	1800	219	61	1560	77	368	13	3.2	16	2.9
16	107	335	1770	175	58	1550	65	484	10	3.3	9.3	3.5
17	66	568	1150	140	57	1200	55	493	8.4	2.5	5.6	3.2
18	38	723	830	118	53	885	45	592	7.2	2.5	3.6	4.9
19	21	653	710	102	50	690	47	475	17	3.3	3.2	7.6
20	11	516	630	94	49	666	72	364	19	3.8	5.9	11
21	8.9	403	601	90	48	706	110	265	16	3.4	17	9.6
22	7.3	341	502	86	47	815	126	190	9.3	3.9	22	7.1
23	7.2	274	396	84	46	742	122	131	5.3	5.9	15	7.1
24	6.8	219	313	82	44	574	105	103	3.9	8.1	9.8	6.7
25	6.7	172	307	94	44	406	83	89	3.0	7.4	6.2	4.7
26	8.3	134	313	192	44	296	65	71	3.1	7.9	4.8	3.5
27	12	104	228	281	44	364	50	55	3.6	9.8	4.3	3.1
28	12	86	210	382	44	410	38	37	3.6	9.8	4.1	2.7
29	14	73	152	442	---	374	29	24	3.3	8.6	3.4	2.6
30	14	87	102	442	---	299	23	23	2.8	8.6	3.5	3.1
31	11	---	74	412	---	219	---	39	---	9.3	4.5	---
TOTAL	2167.2	6208	13587	5934	2706	12913	5023	4868	294.5	147.4	416.7	161.5
MEAN	69.9	207	438	191	96.6	417	167	157	9.82	4.75	13.4	5.38
MAX	243	723	1800	442	368	1560	568	592	36	9.8	59	11
MIN	6.7	12	74	45	44	43	23	12	2.8	1.9	3.2	2.5
CFSM	.72	2.14	4.53	1.98	1.00	4.31	1.73	1.62	.10	.05	.14	.06
IN.	.83	2.39	5.23	2.28	1.04	4.97	1.93	1.87	.11	.06	.16	.06

CAL YR 1977 TOTAL 57112.7 MEAN 156 MAX 1800 MIN 2.4 CFSM 1.61 IN 21.97
WTR YR 1978 TOTAL 54426.3 MEAN 149 MAX 1800 MIN 1.9 CFSM 1.54 IN 20.94

RESERVOIRS IN BEAVER RIVER BASIN, OH

03090000 BERLIN LAKE NEAR BERLIN CENTER.--Lat 41°02'46", long 81°00'10", in T.1 N., R.6 W., Portage County, Hydrologic Unit 05030103, at dam on Mahoning River, 3.2 mi (5.1 km) northwest of Berlin Center. DRAINAGE AREA, 248 mi² (642 km²). PERIOD OF RECORD, December 1942 to current year. Prior to October 1971 published as Berlin Reservoir. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Lake is formed by earthfill dam with concrete spillway; storage began in December 1942. Usable capacity 91,150 acre-ft (112 hm³) between elevations 956.5 ft (291.54 m) (invert of lowest outlet) and 1,032 ft (315 m) (top of taintor gates on controlled section) of which 1,800 acre-ft (2.22 hm³) is in the conservation pool, elevation, 980.0 ft (298.70 m). No dead storage. Flow is normally controlled by sluiceways through dam but additional releases can be made through gates on controlled section of spillway. Lake is used for flood control and to augment flow of Mahoning River during periods of low flow. Water used for industrial purposes in vicinity of Warren and Youngstown. Gage-heights and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 91,150 acre-ft (112 hm³) July 9, 1943, elevation, 1,032.0 ft (375.51 m); minimum, 1,540 acre-ft (1.90 hm³) Jan. 10, 1944, elevation, 978.82 ft (298.344 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 69,880 acre-ft (86.2 hm³) May 20, elevation, 1,027.64 ft (313.225 m); minimum, 15,380 acre-ft (19.0 hm³) Jan. 25, elevation, 1,003.58 ft (305.891 m).

03091000 MILTON RESERVOIR NEAR PRICETOWN.--Lat 41°07'38", long 80°58'40", in T.2 N., R.5 W., Mahoning County, Hydrologic Unit 05030103, at dam on Mahoning River, 0.8 mi (1.3 km) southwest of Pricetown. DRAINAGE AREA, 273 mi² (707 km²). PERIOD OF RECORD, December 1923 to current year. Month-end contents for some periods published in WSP 1305. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by city of Youngstown). Prior to Oct. 7, 1941, nonrecording gage at same site and datum.

Reservoir is formed by earthfill dam with concrete spillway; storage began in 1916. Usable capacity 29,150 acre-ft (35.9 hm³) between elevations 906.0 ft (276.15 m) (bottom of gates) and 951.0 ft (289.86 m) (top of gates). No dead storage. Flow is regulated by two 16-inch and four 36-inch gates on spillway. Reservoir is used to augment flow of Mahoning River during periods of low flow. Water used for industrial purposes in vicinity of Warren and Youngstown. Capacity table computed from base data furnished by city of Youngstown, Division of Water.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 35,020 acre-ft (43.2 hm³) June 29, 1924, elevation, 953.8 ft (290.72 m), of which 5,870 acre-ft (7.24 hm³) was in uncontrolled storage; minimum, 1,220 acre-ft (1.50 hm³) Jan. 23, 1954, elevation, 924.27 ft (281.717 m), from graph based on gage readings.

EXTREMES FOR CURRENT YEAR: Maximum contents, 27,500 acre-ft (33.9 hm³) May 31 elevation, 950.15 ft (289.606 m); minimum, 12,310 acre-ft (15.2 hm³) Mar. 11, elevation, 940.04 ft (286.524 m)

03092450 MICHAEL J. KIRWAN RESERVOIR AT WAYLAND.--Lat 41°09'24", long 81°04'47", in T.3 N., R.6 W., Portage County, Hydrologic Unit 05030103, at dam on West Branch Mahoning River, 0.5 mi (0.8 km) southwest of Wayland. DRAINAGE AREA, 80.5 mi² (208 km²). PERIOD OF RECORD, December 1966 to current year. Prior to October 1971 published as West Branch Reservoir. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Reservoir is formed by earthfill dam with concrete spillway; storage began in December 1966. Usable capacity 78,660 acre-ft (97.0 hm³) between elevations 936.8 ft (285.54 m) (lowest outlet) and 993.0 ft (302.67 m) (crest of spillway) of which 1,740 acre-ft (4.61 hm³) is in conservation pool. Dead storage below elevation 936.8 ft (285.54 m), 85 acre-ft (105,000 m³). Figures given herein represent usable contents. Flow is controlled by gates in concrete conduits in dam. Reservoir is used for flood control and to augment flow of Mahoning River during periods of low flow. Gage-heights and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 66,940 acre-ft (82.5 hm³) Apr. 18, 1972, elevation, 989.19 ft (301.505 m); minimum, 5,370 acre-ft (6.62 hm³) Jan. 5, 1967, elevation, 953.50 ft (290.627 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 57,420 acre-ft (70.8 hm³) May 28-June 1, elevation, 985.79 ft (300.469 m); minimum, 27,210 acre-ft (33.5 hm³) Feb. 10, elevation, 971.94 ft (296 247 m).

03095000 MOSQUITO CREEK LAKE NEAR CORTLAND.--Lat 41°17'58", long 80°45'31", in T.5 N., R.3 W., Trumbull County, Hydrologic Unit 05030103, at dam on Mosquito Creek, 3.0 mi (4.8 km) southwest of Cortland. DRAINAGE AREA, 97.5 mi² (253 km²). PERIOD OF RECORD, October 1943 to current year. Prior to October 1971 published as Mosquito Creek Reservoir. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Lake is formed by earthfill dam. A natural wasteway, elevation, 903.5 ft (275.39 m), discharges into the Grand River basin; storage began in October 1943. Usable capacity 102,200 acre-ft (126 hm³) between elevations 881.0 ft (268.53 m) (lowest outlet), and 904.00 ft (275.539 m), (lake-full level). Dead storage below 881.0 ft (268.53 m), 2,000 acre-ft (2.47 hm³). Figures given herein represent usable contents. Flow is controlled by gates in concrete conduits through dam. Lake is used for flood control and to augment flow of Mahoning River during periods of low flow. Water is used for industrial purposes in vicinity of Warren and Youngstown, and for municipal supply of city of Warren. Gage-heights and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 99,100 acre-ft (122 hm³) June 3, 1947, elevation, 903.65 ft (275.432 m); minimum, 8,600 acre-ft (10.6 hm³) Nov. 16, 1944, elevation, 886.97 ft (270.148 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 86,810 acre-ft (107 hm³) May 19, elevation, 902.20 ft (274.991 m); minimum, 56,980 acre-ft (70.3 hm³) Jan. 25, elevation, 898.16 ft (273.753 m).

03097000 MEANDER CREEK RESERVOIR NEAR MINERAL RIDGE.--Lat 41°09'12", long 80°46'45", in T.3 N., R.3 W., Trumbull County, Hydrologic Unit 05030103, on right side of spillway near center of dam on Meander Creek, 0.8 mi (1.3 km) northwest of Mineral Ridge. DRAINAGE AREA, 83.9 mi² (217 km²). PERIOD OF RECORD, November 1929 to current year. Month-end contents for some periods published in WSP 1305. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Mahoning Valley Sanitary District).

Reservoir is formed by earthfill dam with concrete spillway; storage began in 1929. Usable capacity at spillway level, elevation, 905 ft (276 m), 32,410 acre-ft (40.0 hm³). No dead storage. Figures given herein represent usable contents. Water is used for municipal supply of cities of Niles and Youngstown. Gage-heights furnished by Mahoning Valley Sanitary District. Capacity table computed from base data furnished by Mahoning Valley Sanitary District.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 41,800 acre-ft (51.5 hm³) Jan. 21, 1959, elevation, 909.25 ft (277.139 m); minimum, 9,370 acre-ft (11.6 hm³) Feb. 28, 1954, elevation, 888.78 ft (270.900 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 36,760 acre-ft (45.3 hm³) Dec. 14, elevation, 907.08 ft (276.478 m); minimum, 26,680 acre-ft (32.9 hm³) Sept. 30, elevation, 901.92 ft (274.905 m).

RESERVOIRS IN BEAVER BASIN, OH--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
	03090000	BERLIN LAKE		03091000	MILTON RESERVOIR		03092450	MICHAEL J. KIRWAN RESERVOIR	
Sept. 30.....	1019.20	41590	-	948.81	24980	-	981.69	47050	-
Oct. 31.....	1009.33	22360	-19230	946.33	20700	-4280	979.15	41210	-5840
Nov. 30.....	1005.31	17220	-5140	947.36	22410	+1710	976.28	35200	-6010
Dec. 31.....	1014.27	30650	+13430	946.31	20670	-1740	975.69	34040	-1160
CAL YR 1977	-	-	+19490	-	-	+5930	-	-	-1890
Jan. 31.....	1008.13	20680	-9970	942.40	15160	-5510	972.64	28420	-5620
Feb. 28.....	1006.71	18860	-1820	941.21	13690	-1470	972.29	27820	-600
Mar. 31.....	1024.16	56400	+37540	948.76	24890	+11200	980.87	45110	+17290
Apr. 30.....	1024.42	57320	+920	948.25	23970	-920	983.62	51790	+6680
May 31.....	1025.16	59970	+2650	950.02	27250	+3280	985.79	57420	+5630
June 30.....	1024.81	58700	-1270	947.95	23430	-3820	984.80	54810	-2610
July 31.....	1023.26	53370	-5330	947.73	23050	-380	983.41	51260	-3550
Aug. 31.....	1022.35	50470	-2900	948.08	23660	+610	982.04	47880	-3380
Sept. 30.....	1014.86	31800	-18670	947.43	22530	-1130	981.04	45500	-2380
WTR YR 1978	-	-	-9790	-	-	-2450	-	-	-1550

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
	03095000	MOSQUITO CREEK LAKE		03097000	MEANDER CREEK RESERVOIR	
Sept. 30.....	899.74	67940	-	906.12	34690	-
Oct. 31.....	899.31	64900	-3040	905.50	33420	-1270
Nov. 30.....	899.67	67450	+2550	905.58	33580	+160
Dec. 31.....	899.69	67590	+140	905.14	32690	-890
CAL YR 1977	-	-	+14480	-	-	+5430
Jan. 31.....	898.46	59110	8480	905.42	33260	+570
Feb. 28.....	898.44	58980	-130	904.32	31090	-2170
Mar. 31.....	901.24	79150	+20170	905.36	33140	+2050
Apr. 30.....	901.40	80420	+1270	904.36	31170	-1970
May 31.....	901.67	82550	+2130	906.29	35050	+3880
June 30.....	901.13	78290	-4260	905.56	33540	-1510
July 31.....	900.17	71050	-7240	904.58	31600	-1940
Aug. 31.....	899.50	66240	-4810	903.95	30380	-1220
Sept. 30.....	899.00	62710	-3530	901.98	26790	-3590
WTR YR 1978	-	-	-5230	-	-	-7900

03109320 STATELINE CREEK NEAR NEGLEY, OH

LOCATION.--Lat 40°47'33", long 80°31'20", Columbiana County, Hydrologic Unit 05030101, on left bank downstream side of bridge on Township Road 1024 (Darlington Road), 80 ft (24 m) downstream from confluence of East and West Fork, 500 ft (152 m) upstream from mouth, 800 ft (244 m) west of Pennsylvania state line, and 1.3 mi (2 km) east of Negley.

DRAINAGE AREA.--3.09 mi² (8.00 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1977 to September 1978 (discontinued).

GAGE.--Water-stage recorder and modified v-notch sharp crested weir. Datum of gage is 836.24 ft (255 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 76 ft³/s (2.15 m³/s) Dec. 15, 1977, gage height, 2.35 ft (0.716 m); maximum gage height, 2.76 ft (0.841 m) Dec. 14, 1977 (backwater from ice); minimum daily discharge, 0.65 ft³/s (0.018 m³/s) Jan. 22 to Feb. 9.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 30 ft³/s (0.850 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 14	2215	ice	jam	*2.76	0.841	May 24	1045	30	0.85	2.01	0.613
Dec. 15	1600	*76	2.15	2.35	0.716	May 30	1715	50	1.42	2.19	0.669
Mar. 14	1500	36	1.02	2.07	0.631	July 8	2030	52	1.47	2.21	0.674

Minimum daily discharge, 1.1 ft³/s (0.031 m³/s) Aug. 22, 23, Sept. 27-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	1.5	3.7	2.6	4.2	2.4	7.2	3.9	8.5	4.1	2.9	2.7
2	2.9	1.4	3.3	2.6	3.8	2.4	6.1	3.7	8.0	5.2	2.9	2.1
3	2.4	1.6	2.7	2.6	3.6	2.4	8.1	3.4	8.2	6.9	2.8	2.2
4	1.9	1.7	2.7	2.6	3.6	2.4	8.7	3.4	7.1	5.5	2.8	2.1
5	1.6	1.6	6.6	2.8	3.6	2.4	8.5	4.0	6.9	4.7	2.5	1.8
6	1.9	1.6	8.5	3.0	3.4	2.3	8.0	3.9	6.3	4.5	3.1	1.8
7	1.8	3.3	6.0	4.0	3.4	2.4	8.3	3.7	8.6	4.1	3.5	1.8
8	1.8	3.1	3.6	9.0	3.4	2.6	8.0	3.9	12	9.6	3.1	1.7
9	2.6	2.3	4.2	7.0	3.2	2.5	7.4	9.9	11	9.9	2.7	1.6
10	2.5	3.1	3.8	6.0	3.2	2.9	7.1	6.8	9.0	6.3	5.0	1.8
11	2.2	2.9	2.6	5.0	3.2	3.5	7.1	5.8	7.7	5.0	2.9	1.7
12	2.1	2.5	2.4	4.6	3.2	5.3	7.1	5.4	8.0	5.0	2.6	1.9
13	2.0	2.3	5.0	4.2	3.0	7.3	6.9	6.7	9.0	5.0	2.5	1.9
14	1.8	2.3	32	4.0	3.0	25	6.3	6.9	7.1	7.1	2.3	2.0
15	1.8	2.3	16	3.8	3.0	19	6.3	8.5	6.1	6.6	2.3	3.1
16	1.8	2.2	11	3.6	2.8	14	5.8	9.6	5.5	5.2	2.0	2.0
17	1.8	2.5	9.0	3.4	2.8	11	5.5	16	6.1	4.7	2.0	1.8
18	1.8	2.4	7.5	3.2	2.8	9.7	5.5	17	6.3	4.3	1.8	1.8
19	1.8	2.3	7.0	3.2	2.8	9.5	6.1	13	8.3	4.1	1.8	1.8
20	1.8	2.3	6.5	3.0	2.6	8.5	6.3	11	6.6	4.1	1.8	1.6
21	1.8	2.3	6.0	3.0	2.6	8.6	6.1	10	5.8	3.9	1.6	2.1
22	1.6	2.2	5.5	3.0	2.6	9.2	5.4	8.8	5.2	3.9	1.1	2.5
23	1.6	2.3	5.5	3.0	2.6	8.9	5.0	8.4	4.7	4.5	1.1	2.0
24	1.6	2.3	6.0	3.0	2.6	8.1	5.0	17	4.7	3.9	1.2	1.9
25	1.6	2.2	8.0	4.8	2.4	7.7	5.0	13	4.7	3.3	1.3	1.7
26	1.6	2.1	5.0	10	2.5	7.8	5.0	10	7.4	3.1	1.4	1.6
27	1.6	1.9	4.4	8.0	2.4	8.6	4.5	9.0	7.1	3.3	1.5	1.1
28	1.5	1.9	4.0	4.1	2.4	8.8	4.5	8.6	5.8	3.3	1.6	1.1
29	1.5	1.9	3.2	4.1	---	8.1	4.5	7.8	4.7	3.1	1.7	1.1
30	1.5	2.6	2.8	5.2	---	7.6	4.3	12	4.3	3.1	1.7	1.4
31	1.5	---	2.6	4.4	---	7.4	---	11	---	2.9	5.8	---
TOTAL	60.2	66.9	197.1	132.8	84.7	228.3	189.6	262.1	210.7	150.2	73.3	55.7
MEAN	1.94	2.23	6.36	4.28	3.03	7.36	6.32	8.45	7.02	4.85	2.36	1.86
MAX	4.5	3.3	32	10	4.2	25	8.7	17	12	9.9	5.8	3.1
MIN	1.5	1.4	2.4	2.6	2.4	2.3	4.3	3.4	4.3	2.9	1.1	1.1
CFSM	.63	.72	2.06	1.39	.98	2.38	2.05	2.74	2.27	1.57	.76	.60
IN.	.72	.81	2.37	1.60	1.02	2.75	2.28	3.15	2.54	1.81	.88	.67

CAL YR 1977 TOTAL 1267.30 MEAN 3.47 MAX 32 MIN .65 CFSM 1.12 IN 15.25
WTR YR 1978 TOTAL 1711.60 MEAN 4.69 MAX 32 MIN 1.1 CFSM 1.52 IN 20.60

03109320 STATELINE CREEK NEAR NEGLEY, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1977 to July 1978 (discontinued).
pH: January 1977 to July 1978 (discontinued).
WATER TEMPERATURES: January 1977 to July 1978 (discontinued).
DISSOLVED OXYGEN: January 1977 to June 1978 (discontinued).

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 9,400 micromhos Oct. 29, 1977; minimum, 1,000 micromhos July 8, 1978.
pH: Maximum, 8.4 units July 21, 1978; minimum, 6.1 units Aug. 28, 1977.
WATER TEMPERATURES: Maximum, 29.0°C July 20, 1977; minimum, 0.0°C on many days during winter periods.
DISSOLVED OXYGEN: Maximum, 14.9 mg/L Feb. 7, 1977; minimum, 6.2 mg/L June 11, 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 9,400 micromhos Oct. 29; minimum, 1000 micromhos July 8.
pH: Maximum, 8.4 units July 21; minimum, 6.9 units Dec. 18, 19, 20 and Mar. 14.
WATER TEMPERATURES: Maximum, 26.5°C July 23; minimum, 0.0°C on many days during winter periods.
DISSOLVED OXYGEN: Maximum, 14.0 mg/L Dec. 7, 8; minimum, 6.2 mg/L June 11.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT												
05...	1440	1.5	5420	7.6	16.5	13.5	9.5	90	--	2500	2400	--
NOV												
02...	1355	1.4	7800	7.4	21.5	16.0	8.4	84	--	3800	3600	--
28...	1320	1.8	6450	7.6	1.0	2.5	12.6	92	--	3100	2900	--
JAN												
06...	1600	3.1	4300	7.7	3.5	4.0	11.4	87	--	2100	2000	--
FEB												
02...	1325	3.8	3400	7.6	-3.0	2.5	12.4	90	--	1600	1500	--
MAR												
08...	1125	2.5	5700	7.6	2.0	2.0	13.2	96	--	2600	2400	--
APR												
03...	1245	9.7	2410	7.6	8.0	7.5	11.4	95	--	1100	1000	--
MAY												
03...	1250	3.6	4100	7.8	15.5	14.0	9.1	88	--	2000	1900	--
30...	1245	6.3	2700	7.8	31.0	20.5	8.4	92	--	1300	1200	--
JUN												
30...	1240	4.2	3800	7.7	29.0	22.5	7.4	84	--	1900	1800	--
AUG												
10...	1015	3.9	3800	7.8	22.0	21.0	7.8	87	120	1500	1400	480
15...	1130	2.3	4700	7.6	24.0	24.5	6.6	78	33	2200	2100	800
23...	1100	1.3	3750	7.7	19.0	19.0	7.3	78	120	1600	1500	520
SEP												
06...	1130	1.8	5300	7.6	26.5	19.0	7.3	78	400	2400	2200	860
18...	1245	1.7	4600	7.9	27.0	21.0	7.3	81	180	2400	2200	850

03109320 STATELINE CREEK NEAR NEGLEY, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
OCT											
05...	--	--	--	--	--	--	2500	--	--	--	--
NOV											
02...	--	--	--	--	--	--	7300	--	--	--	--
28...	--	--	--	--	--	--	5700	--	--	--	--
JAN											
06...	--	--	--	--	--	--	2800	--	--	--	--
FEB											
02...	--	--	--	--	--	--	1900	--	--	--	--
MAR											
08...	--	--	--	--	--	--	4700	--	--	--	--
APR											
03...	--	--	--	--	--	--	3800	--	--	--	--
MAY											
03...	--	--	--	--	--	--	1960	--	--	--	--
30...	--	--	--	--	--	--	1190	--	--	--	--
JUN											
30...	--	--	--	--	--	--	1030	--	--	--	--
AUG											
10...	5.6	1.0	6.6	8.7	3	4	1500	10	33	.01	13
15...	5.6	.30	5.9	7.4	14	2	820	120	9.9	.02	80
23...	6.2	1.3	7.5	9.4	16	15	1000	85	20	.01	13
SEP											
06...	.16	11	11	13	18	6	1100	100	130	.01	74
18...	5.8	4.1	9.9	12	5	2	1000	28	110	.01	71

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
OCT											
05...	--	170	0	139	6.8	490	1600	--	--	--	--
NOV											
02...	--	282	0	231	18	570	2400	--	--	--	--
28...	--	244	0	200	9.8	560	2000	--	--	--	--
JAN											
06...	--	155	0	127	4.9	465	1300	--	--	--	--
FEB											
02...	--	142	0	116	5.7	400	900	--	--	--	--
MAR											
08...	--	186	0	153	7.5	480	1600	--	--	--	--
APR											
03...	--	86	0	71	3.5	320	550	--	--	--	--
MAY											
03...	--	176	0	144	4.5	420	1100	--	--	--	--
30...	--	112	0	92	2.8	290	750	--	--	--	--
JUN											
30...	--	146	0	120	4.7	440	1100	--	--	--	--
AUG											
10...	67	151	0	124	3.8	460	770	3090	3250	0	2.1
15...	56	183	0	150	7.4	490	1400	3380	3640	12	1.5
23...	79	170	0	139	5.4	540	930	3070	3260	11	1.9
SEP											
06...	67	224	0	184	8.0	510	1400	3760	4480	16	1.7
18...	63	230	0	189	4.6	2200	1400	4400	4530	11	2.0

03109320 STATELINE CREEK NEAR NEGLEY, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	6420	2650	9180	7900	4900	3820	5040	4510	---	---	5020	4680
2	5590	4560	8460	7230	4720	4050	5440	4360	4180	3030	5050	4450
3	5790	5310	8880	8050	4030	3700	5940	5490	4930	3870	4890	4660
4	6210	5800	8850	7680	6750	3760	---	---	---	---	4960	4810
5	6330	4630	9270	8010	6960	2560	---	---	---	---	4990	4360
6	---	---	7990	7180	3000	2590	5410	4960	5200	4480	5040	4180
7	---	---	7620	4860	4960	2980	5130	4630	5670	4360	5790	5110
8	---	---	7000	5080	5370	3940	4930	2410	5730	4360	5590	4720
9	---	---	7140	6160	3960	3720	4060	2740	6550	5310	5010	4350
10	---	---	6700	4360	---	---	---	---	5430	3960	4990	3760
11	---	---	6690	5560	---	---	---	---	4740	3910	4360	3510
12	---	---	6760	5790	---	---	---	---	4780	3730	3510	2370
13	---	---	7210	6280	---	---	---	---	4620	3580	2670	1960
14	---	---	7450	6210	---	---	---	---	4950	4660	2260	1390
15	---	---	7270	6210	4170	3650	---	---	4870	4510	2190	1740
16	---	---	7510	4990	4890	4210	5170	4740	4480	4290	2620	2200
17	---	---	5850	4620	6160	4330	5520	5130	4360	4240	2800	2640
18	---	---	6610	5880	5110	4560	5350	4690	4590	4210	2950	2800
19	---	---	7090	5800	5190	4870	5440	4900	4810	3750	2980	2740
20	---	---	6490	5580	5170	4170	5650	4930	4860	3700	2880	2710
21	---	---	6630	5610	4990	4690	5740	4900	5230	4780	3010	2880
22	---	---	7380	5670	4890	4750	5520	4600	4930	4600	3060	2950
23	---	---	7320	6580	4960	4690	---	---	4720	4200	3090	3030
24	---	---	6810	6250	4710	4420	---	---	4600	3570	3150	3090
25	---	---	6990	6300	4620	4210	---	---	4650	3580	3130	2940
26	8260	8110	7290	6660	4420	3850	---	---	4770	4050	2980	2670
27	8530	7960	7750	6630	4900	4320	---	---	4630	3910	2800	2650
28	8170	7530	7620	6580	4920	4240	---	---	5050	4680	2950	2790
29	9400	7980	8220	7290	5040	4530	---	---	---	---	3040	2940
30	8820	8050	7210	4030	4750	4290	---	---	---	---	3120	3040
31	8970	8020	---	---	4950	4420	---	---	---	---	3160	3060
MONTH	9400	2650	9270	4030	6960	2560	5940	2410	6550	3030	5790	1390

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3220	3160	4000	3880	2950	2860	4080	3990				
2	3250	3000	3940	3810	2950	2590	4050	2700				
3	2970	2310	4210	3910	2860	2680	3750	2590				
4	2880	2590	4380	3900	2950	2820	3780	3660				
5	2980	2800	4270	3840	3100	2950	3940	3760				
6	3010	2830	4830	4180	3210	3100	3930	3520				
7	2940	2770	4840	4660	3190	1620	4120	3760				
8	3060	2950	6510	3630	2530	1830	4080	1000				
9	2980	2760	3900	1900	2560	2170	4140	1600				
10	2820	2710	4320	2940	2730	2560	3630	2550				
11	3120	2830	4260	3570	3370	2710	3060	2550				
12	3250	3130	4230	2790	3230	2310	3990	3160				
13	3300	3250	3250	2520	2910	2340	4290	4000				
14	3330	3150	3300	2920	3000	2800	4230	1650				
15	3460	3190	3010	2500	2970	2740	4890	3210				
16	3360	3160	2800	2530	2730	2530	3940	3630				
17	3150	2980	2560	1780	2730	2550	5890	3660				
18	3390	3120	2250	1900	3130	2710	4440	3940				
19	3540	3190	2560	2230	3210	2530	4350	3820				
20	3310	3180	2850	2560	3400	3220	4140	3840				
21	3250	3160	3000	2790	3600	3420	4110	3520				
22	3340	3180	3040	2940	3640	3370	3630	3220				
23	3340	3240	3120	2970	---	---	3400	2340				
24	3390	3220	3010	1630	---	---	3330	2980				
25	3480	3390	2470	2010	---	---	---	---				
26	3550	3460	2500	2310	---	---	---	---				
27	3690	3550	2530	1680	3400	3060	---	---				
28	3940	3660	2640	2490	3960	3300	---	---				
29	4110	3960	3120	2470	3970	3630	---	---				
30	4020	3930	2940	1510	4140	3870	---	---				
31	---	---	2920	2430	---	---	---	---				
MONTH	4110	2310	6510	1510	4140	1620	5890	1000				
YEAR	9400	1000										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03109320 STATELINE CREEK NEAR NEGLEY, OHIO--Continued

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.0	7.5	7.6	7.2	7.9	7.6	7.9	7.8	---	---	7.8	7.7
2	7.8	7.8	7.7	7.5	7.8	7.8	7.7	7.6	---	---	7.7	7.5
3	7.8	7.6	7.6	7.5	8.2	7.8	7.6	7.5	---	---	7.8	7.6
4	7.7	7.6	7.6	7.3	8.1	7.7	7.9	7.5	---	---	7.8	7.7
5	7.7	7.6	7.5	7.3	8.0	7.6	8.1	7.9	7.9	7.8	7.7	7.6
6	7.7	7.6	7.5	7.4	8.0	7.7	8.0	7.5	8.1	7.8	7.8	7.6
7	7.9	7.6	7.6	7.2	7.9	7.7	8.0	7.5	7.9	7.8	7.7	7.5
8	7.8	7.7	7.6	7.4	8.0	7.5	7.9	7.5	7.9	7.7	7.8	7.5
9	7.7	7.7	7.6	7.4	7.9	7.6	7.9	7.5	7.8	7.5	7.8	7.6
10	7.8	7.6	7.5	7.4	---	---	---	---	7.8	7.4	7.6	7.5
11	7.9	7.6	7.7	7.4	---	---	---	---	7.6	7.3	7.5	7.4
12	7.8	7.7	7.7	7.5	---	---	---	---	7.4	7.3	7.4	7.3
13	7.9	7.7	7.6	7.4	---	---	---	---	7.4	7.3	7.3	7.2
14	7.8	7.6	7.7	7.4	7.2	7.0	---	---	7.7	7.3	7.2	6.9
15	7.7	7.6	7.8	7.5	7.7	7.3	---	---	7.6	7.3	7.1	7.0
16	7.6	7.6	7.8	7.4	7.7	7.7	---	---	7.4	7.3	7.6	7.1
17	7.8	7.6	7.9	7.6	7.7	7.3	---	---	7.4	7.3	7.7	7.5
18	7.8	7.6	7.8	7.6	7.3	6.9	---	---	7.8	7.3	7.6	7.6
19	7.7	7.6	7.6	7.5	7.1	6.9	---	---	7.7	7.5	7.6	7.5
20	7.7	7.5	7.5	7.3	7.3	6.9	---	---	7.7	7.5	7.8	7.5
21	7.6	7.6	7.7	7.3	7.3	7.0	---	---	7.6	7.4	7.7	7.6
22	7.6	7.5	7.7	7.6	7.4	7.1	---	---	7.5	7.3	7.8	7.5
23	7.6	7.5	7.8	7.5	7.3	7.1	---	---	7.4	7.1	7.8	7.7
24	7.6	7.4	7.6	7.5	7.3	7.0	---	---	7.8	7.4	7.8	7.8
25	7.8	7.5	7.5	7.4	7.4	7.1	---	---	7.8	7.7	7.8	7.7
26	7.6	7.4	7.5	7.4	7.6	7.1	---	---	7.7	7.6	7.8	7.7
27	7.4	7.3	7.4	7.2	7.6	7.4	---	---	7.8	7.6	7.8	7.7
28	7.5	7.4	7.8	7.3	7.8	7.5	---	---	7.8	7.6	7.9	7.8
29	7.5	7.2	7.6	7.4	7.8	7.5	---	---	---	---	7.9	7.8
30	7.5	7.3	7.8	7.3	8.0	7.6	---	---	---	---	7.8	7.8
31	7.6	7.4	---	---	8.0	7.7	---	---	---	---	7.9	7.8
MONTH	8.0	7.2	7.9	7.2	8.2	6.9	8.1	7.5	8.1	7.1	7.9	6.9

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.9	7.8	7.8	7.7	7.8	7.7	7.8	7.7				
2	7.8	7.8	7.9	7.7	7.8	7.7	7.8	7.7				
3	7.8	7.5	7.8	7.7	7.8	7.7	7.8	7.6				
4	7.6	7.5	7.7	7.6	7.8	7.8	7.8	7.7				
5	7.5	7.4	7.7	7.6	7.8	7.7	7.8	7.7				
6	7.6	7.4	7.9	7.8	7.8	7.7	7.8	7.7				
7	7.6	7.5	7.8	7.7	7.7	7.3	7.8	7.6				
8	7.6	7.5	7.8	7.6	7.7	7.5	7.8	7.4				
9	7.6	7.4	7.7	7.3	7.7	7.6	7.8	7.4				
10	7.6	7.4	7.6	7.4	7.9	7.6	7.8	7.3				
11	7.5	7.5	7.7	7.5	7.8	7.7	7.9	7.5				
12	7.6	7.4	7.6	7.5	7.9	7.7	7.8	7.6				
13	7.5	7.4	7.6	7.4	7.8	7.8	7.6	7.5				
14	7.8	7.4	7.5	7.5	7.9	7.8	7.7	7.5				
15	7.8	7.6	7.5	7.4	7.9	7.8	7.8	7.6				
16	7.8	7.6	7.5	7.4	7.9	7.8	7.7	7.7				
17	7.8	7.6	7.4	7.1	8.0	7.9	7.8	7.6				
18	7.8	7.6	7.4	7.1	7.9	7.8	7.7	7.6				
19	7.8	7.7	7.5	7.3	7.9	7.7	7.7	7.5				
20	7.7	7.7	7.5	7.1	7.9	7.8	7.8	7.6				
21	7.8	7.6	7.5	7.4	7.8	7.8	8.4	7.5				
22	7.9	7.7	7.5	7.4	7.9	7.8	7.9	7.6				
23	7.8	7.7	7.8	7.4	---	---	7.9	7.7				
24	7.9	7.7	7.7	7.3	---	---	7.8	7.7				
25	7.8	7.7	7.7	7.6	---	---	---	---				
26	7.9	7.7	7.7	7.6	---	---	---	---				
27	7.9	7.7	7.7	7.6	7.8	7.8	---	---				
28	7.9	7.7	7.7	7.5	7.8	7.7	---	---				
29	7.8	7.7	7.7	7.6	7.8	7.8	---	---				
30	7.8	7.7	7.8	7.5	7.8	7.8	---	---				
31	---	---	7.8	7.7	---	---	---	---				
MONTH	7.9	7.4	7.9	7.1	8.0	7.3	8.4	7.3				
YEAR	8.4	6.9										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03109320 STATELINE CREEK NEAR NEGLEY, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	18.5	15.0	14.0	7.5	10.5	6.0	4.0	2.5	---	---	2.5	.0
2	17.0	13.5	16.0	9.0	8.0	5.0	3.0	1.0	3.5	2.5	1.5	.0
3	15.0	12.0	17.0	11.0	5.0	3.5	2.0	1.0	3.5	1.0	2.0	.0
4	16.0	12.0	17.5	14.0	6.5	3.0	---	---	---	---	2.0	.0
5	14.0	9.5	18.0	14.0	5.0	2.0	---	---	3.0	1.5	2.5	.0
6	16.5	11.5	18.0	14.0	5.0	1.5	4.5	4.0	2.0	1.0	2.5	.0
7	14.0	9.5	17.5	14.5	2.5	1.0	6.0	4.5	1.0	.5	2.5	.0
8	13.5	11.5	15.0	13.5	3.0	1.0	6.0	2.0	1.5	.0	3.5	1.5
9	14.0	11.5	18.0	14.0	5.0	1.0	2.0	1.0	2.0	.0	4.5	.0
10	16.0	11.0	14.5	8.5	---	---	---	---	1.5	.0	5.5	.5
11	15.0	8.5	8.5	6.5	---	---	---	---	1.0	.0	5.5	.5
12	12.0	9.0	7.0	5.0	---	---	---	---	2.5	.0	4.0	2.5
13	11.5	9.5	7.5	5.0	---	---	---	---	1.0	.0	6.5	2.0
14	12.5	6.5	6.0	4.0	5.0	2.5	---	---	2.5	.5	4.5	1.5
15	14.0	7.0	8.5	4.0	5.5	5.0	---	---	1.5	.0	4.0	3.0
16	11.5	8.5	10.5	8.0	7.5	4.0	2.0	2.0	3.0	.5	5.5	3.0
17	11.0	7.0	10.5	7.0	8.0	4.0	2.0	1.0	3.5	1.5	5.0	1.5
18	13.5	6.5	7.0	6.5	8.0	6.5	3.0	1.0	2.5	.0	8.0	1.0
19	12.0	9.5	9.5	6.0	8.0	6.0	3.0	2.0	2.0	.0	9.5	2.5
20	12.5	7.5	10.5	6.5	7.0	5.5	2.0	1.0	.5	.0	10.0	1.5
21	14.0	7.0	11.0	6.5	6.0	4.0	2.5	1.5	.5	.0	8.5	5.5
22	14.0	8.0	7.5	5.0	4.5	3.5	3.0	1.0	1.0	.0	12.0	4.5
23	13.5	9.0	10.0	6.5	6.5	3.5	---	---	1.0	.0	11.0	6.5
24	15.0	8.0	9.5	6.0	8.0	3.0	---	---	2.5	1.0	10.0	4.5
25	14.0	9.0	7.5	4.5	7.5	1.5	4.0	2.5	3.0	1.5	5.0	4.5
26	17.5	12.5	5.5	2.0	2.0	1.0	2.0	1.0	3.0	1.0	7.0	4.5
27	17.5	11.0	5.0	1.0	2.5	1.5	---	---	2.5	.0	6.0	5.0
28	16.5	10.5	4.0	1.0	2.5	1.0	---	---	3.5	.0	11.0	5.0
29	14.0	7.5	4.0	1.0	3.5	2.0	---	---	---	---	11.0	4.0
30	13.5	7.0	7.0	4.0	5.0	3.0	---	---	---	---	12.5	4.0
31	13.0	6.5	---	---	5.5	2.0	---	---	---	---	10.5	5.5
MONTH	18.5	6.5	18.0	1.0	10.5	1.0	6.0	1.0	3.5	.0	12.5	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	16.0	6.5	16.0	4.5	23.0	14.5	19.5	16.5				
2	8.5	5.0	17.5	5.5	20.5	15.5	17.0	16.0				
3	9.0	6.0	18.5	4.5	19.0	14.0	17.5	16.0				
4	13.0	6.5	11.0	7.0	17.5	12.0	18.0	16.5				
5	13.5	7.0	11.5	8.0	20.0	13.0	21.5	15.0				
6	9.0	7.0	10.5	9.0	20.0	11.0	23.0	15.5				
7	14.0	8.0	16.5	7.0	17.5	15.0	24.5	16.5				
8	14.0	6.0	12.5	11.0	17.0	15.5	21.5	18.0				
9	13.5	4.5	16.0	11.0	19.0	14.0	22.0	16.5				
10	17.0	6.5	14.0	10.0	20.5	12.5	21.0	16.5				
11	12.5	8.5	20.5	7.5	22.0	13.0	20.0	14.0				
12	17.5	7.0	15.0	12.5	22.5	15.5	22.0	13.0				
13	17.0	8.5	13.5	11.5	17.0	12.5	21.0	14.0				
14	14.0	6.0	12.5	11.0	18.0	11.0	22.5	17.5				
15	13.0	5.5	12.5	10.5	19.0	11.0	24.5	16.5				
16	15.5	4.0	15.5	11.0	20.0	12.5	22.0	17.5				
17	16.0	4.0	12.5	11.5	21.5	15.5	22.5	15.5				
18	9.5	6.0	17.0	11.0	24.0	17.0	23.5	15.5				
19	15.0	8.0	20.5	11.0	21.5	17.5	24.5	16.5				
20	10.0	8.0	20.5	12.0	22.0	16.0	25.5	18.0				
21	8.5	6.0	16.0	12.0	22.0	17.0	25.5	19.0				
22	15.5	4.0	19.5	10.0	21.0	15.0	25.0	19.5				
23	11.0	4.0	15.0	12.0	---	---	26.5	19.5				
24	14.0	8.5	15.5	13.5	---	---	22.0	19.5				
25	13.0	6.0	20.0	12.0	---	---	---	---				
26	15.5	7.0	21.0	12.0	---	---	---	---				
27	18.0	6.5	21.5	13.0	23.5	18.5	---	---				
28	18.5	6.0	22.5	14.0	24.0	17.0	---	---				
29	18.5	6.5	22.5	14.5	24.0	17.0	---	---				
30	17.5	8.5	20.5	15.0	23.5	17.0	---	---				
31	---	---	22.0	15.5	---	---	---	---				
MONTH	18.5	4.0	22.5	4.5	24.0	11.0	26.5	13.0				
YEAR	26.5	.0										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03109320 STATELINE CREEK NEAR NEGLEY, OH--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	9.1	7.1	10.3	8.4	12.4	10.9	---	---	---	---		
2	10.4	8.4	10.2	7.8	13.0	12.2	---	---	12.4	12.1		
3	10.8	8.7	9.2	7.4	13.6	13.2	---	---	12.8	12.3		
4	10.2	8.6	8.3	7.3	13.6	12.8	---	---	---	---		
5	11.1	8.5	8.1	7.0	13.9	12.4	---	---	---	---		
6	9.3	7.5	8.2	7.2	13.5	12.6	12.0	11.8	13.4	13.0		
7	9.8	7.8	8.6	7.2	14.0	13.4	12.1	11.7	13.5	13.3		
8	9.0	7.6	8.7	8.2	14.0	13.5	12.4	11.6	13.9	13.3		
9	8.0	7.5	8.4	7.5	13.9	13.3	12.8	11.9	13.8	12.6		
10	8.8	7.3	9.9	8.2	---	---	---	---	---	---		
11	9.4	7.1	10.6	10.0	---	---	---	---	---	---		
12	8.5	7.4	11.2	10.6	---	---	---	---	---	---		
13	9.2	7.9	11.3	8.9	---	---	---	---	---	---		
14	9.9	7.8	9.7	7.3	11.5	10.9	---	---	---	---		
15	9.5	7.3	10.3	8.1	12.2	11.5	---	---	---	---		
16	8.0	7.5	9.6	9.1	12.5	11.8	---	---	---	---		
17	8.4	7.4	10.3	9.4	12.5	11.1	12.9	12.7	---	---		
18	8.6	7.0	10.7	10.2	---	---	12.8	12.4	---	---		
19	8.9	7.4	10.9	9.8	---	---	12.7	12.5	---	---		
20	9.4	8.1	9.9	7.0	---	---	12.8	12.4	---	---		
21	10.3	9.1	8.7	7.0	---	---	12.5	11.7	---	---		
22	10.7	8.4	9.2	8.5	---	---	11.6	9.1	---	---		
23	9.6	8.4	8.9	7.7	---	---	---	---	---	---		
24	10.2	8.2	8.8	8.2	---	---	---	---	---	---		
25	9.6	7.9	10.5	8.1	---	---	11.5	10.7	---	---		
26	8.6	7.5	10.3	7.8	---	---	11.3	10.5	---	---		
27	10.1	7.4	---	---	---	---	---	---	---	---		
28	9.3	7.8	13.0	11.3	---	---	---	---	---	---		
29	10.2	8.3	13.3	12.6	---	---	---	---	---	---		
30	10.5	8.4	12.6	11.8	---	---	---	---	---	---		
31	10.6	8.6	---	---	---	---	---	---	---	---		
MONTH	11.1	7.0	13.3	7.0	14.0	10.9	12.9	9.1	13.9	12.1		

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	11.0	7.5	9.6	6.8						
2	---	---	10.5	6.9	8.0	6.8						
3	10.9	9.2	10.9	8.6	7.5	6.7						
4	11.1	9.2	11.9	10.8	---	---						
5	11.0	9.3	11.6	10.9	---	---						
6	10.[illegible]	10.3	11.6	11.1	---	---						
7	10.7	9.2	12.3	9.4	8.5	6.5						
8	11.1	9.2	10.8	9.9	9.1	8.2						
9	11.7	9.1	10.9	9.4	8.7	7.5						
10	11.0	8.0	11.4	10.1	8.9	6.8						
11	10.3	9.1	12.2	8.1	8.2	6.2						
12	10.7	7.8	10.7	9.9	---	---						
13	10.2	8.0	10.9	10.5	---	---						
14	11.1	8.7	11.2	10.7	---	---						
15	11.1	8.9	11.5	10.9	---	---						
16	11.6	8.3	11.4	9.3	---	---						
17	11.5	7.8	10.9	7.2	---	---						
18	10.8	9.6	11.2	7.7	---	---						
19	10.8	8.4	11.5	8.5	---	---						
20	10.8	9.9	11.8	8.3	---	---						
21	11.6	10.7	10.3	9.3	---	---						
22	12.4	8.4	10.9	8.0	---	---						
23	12.3	9.8	9.8	8.7	---	---						
24	10.6	8.9	9.7	8.6	---	---						
25	11.2	8.9	9.8	7.4	---	---						
26	10.7	8.0	9.3	7.3	---	---						
27	11.7	7.3	8.8	7.0	---	---						
28	10.9	7.1	8.3	7.2	---	---						
29	10.6	7.0	---	---	---	---						
30	9.8	7.2	8.6	7.2	---	---						
31	---	---	9.0	7.5	---	---						
MONTH	12.4	7.0	12.3	6.9	9.6	6.2						
YEAR	14.0	6.2										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

LITTLE BEAVER CREEK BASIN

03109500 LITTLE BEAVER CREEK NEAR EAST LIVERPOOL, OH

LOCATION.--Lat 40°40'33", long 80°32'27", Columbiana County, Hydrologic Unit 05030101, on right bank at downstream side of Grimes Bridge, 1.5 mi (2.4 km) upstream from Island Run, 4 mi (6 km) upstream from mouth, and 4 mi (6 km) northeast of East Liverpool.

DRAINAGE AREA.--496 mi² (1,285 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1915 to current year.

REVISED RECORDS.--WSP 873: 1937(M). WSP 1305: 1916-18(M), 1921-22(M), 1924-30(M), 1933(M), 1936(M). WSP 1907: 1950(P), drainage area.

GAGE.--Water-stage recorder. Datum of gage is 702.77 ft (214.204 m) National Geodetic Vertical Datum of 1912. Prior to Sept. 22, 1926, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--63 years, 517 ft³/s (14.64 m³/s), 14.16 in/yr (360 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft³/s (708 m³/s) July 19, 1941, gage height, 17.4 ft (5.30 m), from rating curve extended above 16,000 ft³/s (453 m³/s) on basis of slope-area measurement of peak flow; minimum, 12 ft³/s (0.34 m³/s) several days in 1918, 1930, 1932, 1936.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,000 ft³/s (142 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 14	2400	7580	214	10.30	3.139	Mar. 14	0800	*10800	306	11.99	3.655
Jan. 26	1400	ice jam		*12.34	3.761						

Minimum discharge, 74 ft³/s (2.10 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	539	172	958	280	700	210	830	311	637	329	126	506
2	1150	162	1070	260	600	210	685	294	513	352	117	250
3	680	161	768	250	500	210	956	280	604	1110	115	177
4	482	158	647	250	460	210	1570	273	537	1170	123	151
5	364	153	1140	250	430	210	1400	330	435	802	114	133
6	326	147	2800	250	400	210	1160	348	379	489	121	118
7	319	191	1720	500	370	210	1270	312	459	379	254	107
8	305	385	1050	1220	340	210	1060	299	2210	358	378	98
9	566	316	881	1780	320	210	866	1160	1860	669	369	91
10	755	319	652	450	300	250	770	1470	1310	435	897	91
11	530	618	611	400	280	400	720	845	815	320	702	89
12	396	467	571	2200	270	700	690	619	627	267	418	89
13	329	367	665	1940	260	4000	584	723	912	237	272	153
14	290	347	3900	1500	250	9040	506	1270	716	451	213	148
15	272	336	6660	1000	240	6720	458	1490	517	529	180	267
16	275	358	3730	700	240	3270	422	1980	428	345	155	253
17	260	637	2020	600	240	2010	399	2620	385	262	140	173
18	245	854	1490	500	230	1570	400	3910	353	219	126	143
19	242	635	1270	430	230	1400	482	2450	1080	194	115	131
20	242	472	1240	380	230	1370	755	1540	1030	176	114	122
21	251	427	1360	350	230	1410	770	1220	586	163	105	111
22	248	537	1020	330	220	1460	625	958	455	185	97	158
23	242	488	816	320	220	1200	534	786	369	202	92	124
24	230	432	733	320	220	974	530	1650	311	307	89	111
25	222	392	850	500	220	938	502	1860	273	285	87	99
26	217	368	675	3000	210	1130	450	1110	354	206	84	90
27	212	337	537	3500	210	1800	410	805	1000	175	81	85
28	212	314	400	3000	210	1720	375	654	1170	171	82	82
29	207	288	350	2000	---	1240	350	556	722	163	89	76
30	195	337	320	1300	---	956	329	636	438	147	127	75
31	180	---	300	900	---	854	---	1260	---	135	503	---
TOTAL	10983	11175	41204	30660	8630	46302	20858	34019	21485	11232	6485	4301
MEAN	354	373	1329	989	308	1494	695	1097	716	362	209	143
MAX	1150	854	6660	3500	700	9040	1570	3910	2210	1170	897	506
MIN	180	147	300	250	210	210	329	273	273	135	81	75
CFSM	.71	.75	2.68	1.99	.62	3.01	1.40	2.21	1.44	.73	.42	.29
IN.	.82	.84	3.09	2.30	.65	3.47	1.56	2.55	1.61	.84	.49	.32

CAL YR 1977 TOTAL 213608 MEAN 585 MAX 6940 MIN 70 CFSM 1.18 IN 16.02
WTR YR 1978 TOTAL 247334 MEAN 678 MAX 9040 MIN 75 CFSM 1.37 IN 18.55

03109500 LITTLE BEAVER CREEK NEAR EAST LIVERPOOL, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964 to 1978 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 1976 to July 1978 (discontinued).
WATER TEMPERATURES: February 1976 to July 1978 (discontinued).

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument.
Sediment data collected at this site 1969 to 1974.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,070 micromhos Sept. 5, 1977; minimum, 168 micromhos Dec. 15, 1977.
WATER TEMPERATURES: Maximum recorded, 31.0°C July 20, 1977; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,050 micromhos May 9; minimum, 168 micromhos Dec. 15.
WATER TEMPERATURES: Maximum recorded, 25.0°C June 18; minimum, 0.0°C on many days during winter period.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	746	549	768	750	622	546			554	541	778	742
2	560	523	791	766	537	466			573	554	---	---
3	527	503	807	774	487	458			576	570	---	---
4	---	---	857	807	524	492			610	576	---	---
5	---	---	870	852	538	443			651	614	---	---
6	---	---	882	862	439	385			638	617	---	---
7	---	---	880	798	399	386			645	622	---	---
8	---	---	870	768	439	402			683	647	---	---
9	---	---	880	815	468	441			720	675	---	---
10	---	---	817	711	484	468			722	696	---	---
11	---	---	707	638	503	482			711	686	---	---
12	---	---	662	607	524	503			716	688	---	---
13	---	---	627	604	547	524			701	679	---	---
14	---	---	668	612	570	199			692	675	---	---
15	---	---	685	645	202	168			716	685	---	---
16	---	---	705	657	---	---			742	714	---	---
17	---	---	701	602	---	---			742	722	---	---
18	---	---	606	554	---	---			740	712	---	---
19	---	---	549	530	---	---			763	727	---	---
20	---	---	559	537	---	---			759	740	---	---
21	---	---	576	555	---	---			787	753	---	---
22	---	---	585	554	---	---			781	750	---	---
23	---	---	580	568	---	---			785	770	---	---
24	---	---	581	560	---	---			781	761	506	488
25	---	---	578	560	---	---			770	718	512	494
26	---	---	585	573	---	---			753	722	540	487
27	---	---	596	580	---	---			759	737	498	411
28	---	---	599	580	---	---			783	716	411	389
29	---	---	617	583	---	---			---	---	435	402
30	---	---	627	610	---	---			---	---	448	424
31	---	---	---	---	---	---			---	---	465	448
MONTH	746	503	882	530	622	168			787	541	778	389

03109500 LITTLE BEAVER CREEK NEAR EAST LIVERPOOL, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	482	465	625	589	495	454						
2	494	473	642	619	537	477						
3	496	469	696	632	562	512						
4	492	431	720	573	599	543						
5	435	427	711	668	677	591						
6	437	426	740	685	712	662						
7	446	427	746	709	740	593						
8	453	448	731	512	729	262						
9	456	441	1050	524	348	265						
10	463	449	849	527	355	319						
11	477	458	527	501	417	342						
12	492	478	583	526	456	386						
13	505	489	593	460	502	439						
14	517	508	555	495	496	470						
15	536	513	524	424	519	491						
16	549	524	498	421	536	509						
17	563	552	540	435	568	526						
18	583	474	488	444	617	516						
19	559	491	567	477	872	581						
20	568	495	642	560	807	672						
21	546	488	867	572	748	675						
22	522	496	870	748	820	750						
23	536	484	755	591	854	804						
24	512	488	740	546	893	839						
25	520	496	753	636	877	831						
26	531	506	623	570	898	712						
27	533	506	620	538	---	---						
28	565	534	---	---	---	---						
29	560	552	---	---	---	---						
30	607	568	---	---	---	---						
31	---	---	---	---	---	---						
MONTH	607	426	1050	421	898	262						
YEAR	1050	168										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03109500 LITTLE BEAVER CREEK NEAR EAST LIVERPOOL, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	18.5	16.5	11.5	10.5	7.5	5.0	.0	.0	.5	.0	1.0	.0
2	18.0	15.5	13.5	10.0	7.0	6.0	.0	.0	.5	.0	---	---
3	16.0	14.5	15.0	12.5	6.0	4.5	.0	.0	.5	.5	---	---
4	---	---	16.5	14.5	4.5	3.5	---	---	1.0	.0	---	---
5	---	---	17.5	15.5	4.0	3.0	---	---	1.0	.5	---	---
6	---	---	17.5	16.0	4.0	2.5	---	---	.5	.0	---	---
7	---	---	18.0	16.5	2.0	.5	---	---	.5	.0	---	---
8	---	---	17.0	15.5	1.0	.5	---	---	.5	.0	---	---
9	---	---	17.0	15.5	1.0	.5	---	---	1.0	.0	---	---
10	---	---	16.5	12.0	.5	.5	---	---	.5	.0	---	---
11	---	---	11.5	8.0	.5	.5	---	---	.5	.0	---	---
12	---	---	8.0	6.5	.5	.5	---	---	.5	.0	---	---
13	---	---	6.5	5.5	1.5	.5	---	---	1.0	.0	---	---
14	---	---	5.0	4.0	4.5	1.0	---	---	1.0	.0	---	---
15	---	---	6.5	4.0	4.5	3.5	---	---	.5	.0	---	---
16	---	---	8.5	6.5	4.5	3.5	---	---	1.0	.0	---	---
17	---	---	9.0	8.0	5.5	4.0	---	---	.5	.0	---	---
18	---	---	8.0	7.0	6.5	5.5	---	---	.5	.0	---	---
19	---	---	7.0	6.5	7.0	6.5	---	---	.5	.0	---	---
20	---	---	8.5	6.5	6.5	5.5	---	---	.5	.0	---	---
21	---	---	9.5	8.5	5.5	3.5	---	---	1.0	.0	---	---
22	---	---	8.5	7.0	3.0	1.0	---	---	1.0	.0	---	---
23	---	---	8.0	7.0	2.0	.5	---	---	1.0	.0	---	---
24	---	---	8.0	7.0	3.5	.5	---	---	1.0	.0	8.5	6.5
25	---	---	7.0	6.0	4.0	.5	---	---	1.0	.0	7.0	4.5
26	---	---	6.0	2.5	.0	.0	---	---	1.0	.0	5.5	3.5
27	---	---	2.5	1.0	.0	.0	---	---	1.0	.0	5.5	4.5
28	---	---	2.0	1.0	.5	.0	---	---	1.0	.0	7.0	4.0
29	---	---	2.0	.5	.0	.0	---	---	---	---	8.5	5.0
30	---	---	5.0	2.0	.0	.0	---	---	---	---	9.0	6.0
31	---	---	---	---	.5	.0	---	---	---	---	8.5	6.5
MONTH	18.5	14.5	18.0	.5	7.5	.0	.0	.0	1.0	.0	9.0	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	12.0	7.5	15.0	9.5	24.0	17.5	21.5	17.5				
2	11.0	8.0	15.5	9.5	23.0	19.5	19.0	15.5				
3	7.5	6.5	15.5	10.0	21.5	18.0	15.5	15.0				
4	10.0	6.5	14.0	11.0	19.0	15.5	---	---				
5	11.0	8.5	11.5	10.0	20.5	15.5	---	---				
6	9.5	8.0	11.0	10.0	21.5	16.0	---	---				
7	12.0	8.0	14.5	9.5	20.5	18.0	---	---				
8	11.5	8.0	13.5	12.5	18.0	16.0	---	---				
9	10.0	7.0	15.5	13.0	18.5	15.5	---	---				
10	13.0	7.0	15.0	12.0	19.5	15.0	---	---				
11	12.5	10.5	17.5	11.0	22.0	16.5	---	---				
12	13.5	8.5	16.5	15.0	23.0	18.0	---	---				
13	14.5	10.0	14.5	13.5	20.0	15.5	---	---				
14	12.0	8.5	13.5	11.0	18.0	14.5	---	---				
15	12.5	7.0	12.5	11.0	19.5	14.0	---	---				
16	12.5	6.5	13.5	11.0	21.0	15.5	---	---				
17	12.5	7.5	12.5	11.0	24.0	19.5	---	---				
18	10.5	8.5	15.5	11.0	25.0	21.0	---	---				
19	12.0	8.5	18.5	13.0	23.0	20.5	---	---				
20	11.0	9.0	19.5	15.0	24.0	20.0	---	---				
21	11.5	7.0	19.0	15.5	23.5	21.0	---	---				
22	11.5	6.0	18.0	13.0	24.0	20.0	---	---				
23	9.5	7.0	16.5	14.0	23.5	18.5	---	---				
24	11.5	7.5	16.5	14.0	24.0	19.0	---	---				
25	11.0	8.0	19.0	14.0	24.5	19.5	---	---				
26	12.5	8.0	21.5	16.0	24.0	21.0	---	---				
27	14.5	8.5	22.0	18.0	22.5	19.5	---	---				
28	15.0	10.0	23.0	18.0	23.5	20.0	---	---				
29	15.5	11.0	23.5	19.0	23.0	19.0	---	---				
30	17.0	12.0	22.5	19.0	22.5	20.0	---	---				
31	---	---	21.0	18.0	---	---	---	---				
MONTH	17.0	6.0	23.5	9.5	25.0	14.0	21.5	15.0				

YEAR 25.0 .0

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03110000 YELLOW CREEK NEAR HAMMONDSVILLE, OH

LOCATION.--Lat 40°32'16", long 80°43'31", in sec. 29, T.8 N., R.2 W., Jefferson County, Hydrologic Unit 05030101, on right bank 1,000 ft (305 m) upstream from Lowery Run, 0.9 mi (1.4 km) upstream from Brush Creek, and 1.6 mi (2.6 km) southwest of Hammondsville.

DRAINAGE AREA.--147 mi² (381 km²).

PERIOD OF RECORD.--October 1940 to current year.

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 692.10 ft (210.952 m) Ohio State Highway Department bench mark.

REMARKS.--Records good except those for winter periods, which are fair; and those for the periods of no gage-height record, which are poor. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--38 years, 157 ft³/s (4.446 m³/s), 14.50 in/yr (368 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,580 ft³/s (271 m³/s) Jan. 27, 1952, gage height, 12.17 ft (3.709 m); minimum, 0.8 ft³/s (0.023 m³/s) Sept. 24 to Oct. 1, Oct. 7, 8, 1963.

EXTREMES OUTSIDE PERIOD OF RECORD.--The highest stage observed is reported to have occurred in 1912.

EXTREMES FOR CURRENT YEAR.--Peak discharge, above base of 2,000 ft³/s (56.6 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 5	2330	2100	59.5	6.15	1.875	Mar. 14	unknown	*3680	104	*7.86	2.396
Dec. 14	2000	2170	61.5	6.23	1.899	June 9	0500	2600	73.6	6.71	2.045

Minimum daily discharge, 12 ft³/s (0.34 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	31	230	65	250	65	285	125	140	61	48	182
2	300	24	254	65	200	60	244	118	125	89	33	87
3	160	25	194	60	170	60	257	109	149	354	28	61
4	124	23	175	60	150	60	334	93	118	244	33	49
5	93	26	650	60	130	60	430	118	104	161	31	39
6	89	36	1580	60	120	60	418	104	98	123	31	33
7	83	33	601	80	110	60	499	91	98	98	135	28
8	77	37	368	251	100	60	422	91	880	104	221	26
9	169	39	307	691	90	65	358	322	2080	330	83	23
10	194	44	215	342	85	70	315	281	745	167	98	22
11	146	146	209	311	80	100	288	203	410	118	87	20
12	119	81	183	691	80	300	260	170	292	91	61	20
13	97	68	194	637	80	1000	218	224	410	77	49	22
14	83	63	1080	468	80	1500	188	390	267	224	40	27
15	73	59	1460	320	75	2000	167	402	206	264	35	38
16	70	66	673	250	75	1000	153	406	167	137	31	43
17	70	171	456	180	70	750	142	563	148	104	28	28
18	63	224	349	150	70	600	140	1120	132	81	26	33
19	58	156	280	130	70	500	179	760	173	68	23	33
20	54	119	267	110	65	500	346	517	132	57	31	33
21	47	104	260	100	65	500	342	402	111	52	31	25
22	43	101	215	95	65	550	278	311	106	48	22	21
23	44	83	186	90	65	450	234	267	83	43	19	19
24	68	75	175	95	65	370	231	386	73	48	17	17
25	61	66	194	150	65	350	206	346	66	49	23	17
26	83	63	143	850	65	450	191	264	73	43	19	16
27	101	53	120	1000	65	650	173	221	98	39	16	15
28	46	50	100	700	65	600	156	191	176	35	16	13
29	33	43	90	500	---	450	145	167	102	32	17	13
30	31	48	80	400	---	350	137	150	73	34	35	12
31	28	---	70	300	---	310	---	191	---	40	285	---
TOTAL	2847	2157	11350	9261	2670	13900	7736	9103	7826	3415	1652	1015
MEAN	91.8	71.9	366	299	95.4	448	258	294	261	110	53.3	33.8
MAX	300	224	1580	1000	250	2000	499	1120	2080	354	285	182
MIN	28	23	70	60	65	60	137	91	66	32	16	12
CFSM	.62	.49	2.49	2.03	.65	3.05	1.76	2.00	1.78	.75	.36	.23
IN.	.72	.55	2.87	2.34	.68	3.52	1.96	2.30	1.98	.86	.42	.26

CAL YR 1977 TOTAL 58304 MEAN 160 MAX 1670 MIN 13 CFSM 1.09 IN 14.75
WTR YR 1978 TOTAL 72932 MEAN 200 MAX 2080 MIN 12 CFSM 1.36 IN 18.46

Note.--No gage-height record Feb. 27 to Apr. 2.

03111500 SHORT CREEK NEAR DILLONVALE, OH

LOCATION.--Lat 40°11'38", long 80°44'04", in sec. 30, T.4 N., R.2 W., Jefferson County, Hydrologic Unit 05030106, on right bank at downstream side of bridge on State Highway 150, 2.1 mi (3.4 km) east of Dillonvale, 2.2 mi (3.5 km) downstream from Jug Run, and 2.9 mi (4.7 km) upstream from Little Short Creek.

DRAINAGE AREA.--123 mi² (319 km²).

PERIOD OF RECORD.--October 1941 to current year.

REVISED RECORDS.--WSP 1003: 1942-43. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 676.1 ft (206.08 m) State of Ohio bench mark. Prior to Oct. 21, 1941, nonrecording gage at same site and datum.

REMARKS.--Records poor. Water-quality data collected at this site 1964 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--37 years, 125 ft³/s (3.540 m³/s), 13.80 in/yr (351 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,500 ft³/s (184 m³/s) Mar. 6, 1945, gage height, 8.77 ft (2.673 m); maximum gage height, 10.15 ft (3.094 m) Mar. 5, 1963, from graph based on gage readings; minimum daily discharge, 2.8 ft³/s (0.079 m³/s) Sept. 21, 27, 1947.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (34.0 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 5	2000	1520	43.0	4.98	1.518	Mar. 14	2000	2030	57.5	6.03	1.838
Jan. 27	0100	2480	70.2	6.75	2.057	June 8	0600	*3860	109	*8.45	2.576

Minimum daily discharge, 30 ft³/s (0.85 m³/s) Nov. 5, 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	34	136	65	330	70	225	97	116	150	55	100
2	200	34	107	60	280	70	192	93	104	200	50	71
3	140	32	88	58	240	65	240	90	124	900	50	60
4	90	32	90	55	220	65	252	90	106	600	50	55
5	70	30	586	55	200	65	367	124	97	300	60	50
6	65	30	562	60	190	60	342	100	90	200	80	46
7	60	40	247	69	170	60	432	95	93	170	200	48
8	60	75	160	340	160	60	315	97	1960	240	200	48
9	150	65	130	511	150	60	262	220	613	210	300	46
10	110	118	115	215	140	65	240	145	365	170	400	46
11	90	155	110	192	130	80	222	116	277	150	300	50
12	75	95	109	165	130	387	200	106	250	130	220	70
13	65	80	170	187	120	640	175	172	412	120	180	95
14	60	71	670	138	120	1380	157	225	255	160	150	160
15	55	66	487	120	110	835	145	212	207	200	140	150
16	51	66	297	110	110	487	132	212	185	140	132	120
17	51	136	225	110	100	387	128	420	170	120	120	95
18	50	136	190	100	100	312	136	779	162	110	107	85
19	49	102	160	100	95	275	192	425	297	100	109	80
20	49	87	182	95	90	252	265	307	185	90	136	70
21	48	83	172	90	90	285	237	262	155	100	100	85
22	47	83	140	90	85	315	197	225	150	120	99	95
23	45	72	126	90	85	140	167	210	140	160	95	75
24	45	69	118	90	80	140	167	257	140	150	90	65
25	44	62	130	100	80	140	150	215	140	120	88	60
26	44	59	88	1440	75	150	145	177	150	100	88	55
27	44	50	92	2040	75	450	128	155	450	85	88	50
28	42	53	95	1450	70	550	116	140	550	75	79	48
29	40	49	109	1000	---	250	113	130	250	70	145	46
30	38	63	102	500	---	180	104	124	180	65	102	46
31	36	---	75	400	---	247	---	155	---	60	165	---
TOTAL	2061	2131	6068	10095	3825	8522	6143	6175	8373	5565	4178	2172
MEAN	66.5	71.0	196	326	137	275	205	199	279	180	135	72.4
MAX	200	155	670	2040	330	1380	432	779	1960	900	400	160
MIN	36	30	75	55	70	60	104	90	90	60	50	46
CFSM	.54	.58	1.59	2.65	1.11	2.24	1.67	1.62	2.27	1.46	1.10	.59
IN.	.62	.64	1.84	3.05	1.16	2.58	1.86	1.87	2.53	1.68	1.26	.66

CAL YR 1977 TOTAL 43764 MEAN 120 MAX 1260 MIN 21 CFSM .98 IN 13.24
WTR YR 1978 TOTAL 65308 MEAN 179 MAX 2040 MIN 30 CFSM 1.46 IN 19.75

03114000 CAPTINA CREEK AT ARMSTRONGS MILLS, OH

LOCATION.--Lat 39°54'31", long 80°55'27", in NE 1/4 sec. 10, T.5 N., R.4 W., Belmont County, Hydrologic Unit 05030106, on left bank at downstream side of bridge on State Highway 148, 0.5 mi (0.8 km) east of Armstrongs Mills, and 0.7 mi (1.1 km) downstream from Anderson Run.

DRAINAGE AREA.--134 mi² (347 km²).

PERIOD OF RECORD.--August 1926 to September 1935, October 1958 to current year.

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 739.53 ft (225.409 m) National Geodetic Vertical Datum of 1929. Aug. 20, 1926 to Sept. 30, 1935, nonrecording gage at same site, at datum 1.0 ft (0.30 m) higher.

REMARKS.--Records good except for the winter periods, which are fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--29 years, 160 ft³/s (4.531 m³/s), 16.21 in/yr (412 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,000 ft³/s (340 m³/s) Sept. 1, 1975, gage height, 13.61 ft (4.148 m); maximum gage height, 14.40 ft (4.389 m), present datum, Aug. 7, 1935; no flow at times during 1929-30, 1932, 1934, 1959, 1963-66, 1972-74.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s (85.0 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 5	1500	4100	116	7.82	2.384	Mar. 14	1700	*5790	164	*9.26	2.822
Jan. 25	2200	4630	131	8.29	2.527	June 28	0130	3000	85.0	6.80	2.073

Minimum discharge, 0.60 ft³/s (0.017 m³/s) Sept. 12, 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	17	338	85	190	44	196	130	60	111	25	30
2	109	16	220	85	170	44	160	120	53	91	14	13
3	51	17	178	80	150	44	162	104	87	190	11	7.7
4	35	17	167	80	130	44	167	104	67	150	11	6.3
5	26	19	1740	80	120	44	223	137	51	100	11	8.8
6	41	18	860	90	110	44	265	118	43	71	15	4.8
7	51	18	363	442	100	44	590	102	50	54	28	3.6
8	47	31	275	1060	90	44	345	104	145	53	34	2.7
9	223	41	317	938	85	44	253	199	229	62	19	2.0
10	145	155	235	465	80	50	208	162	95	67	15	2.3
11	87	202	187	300	75	100	190	137	64	54	12	1.7
12	60	107	170	250	70	500	165	125	54	36	16	1.3
13	47	73	170	220	65	1500	142	307	175	30	19	2.1
14	40	56	836	190	60	3570	123	430	89	40	12	1.3
15	35	50	595	170	55	1730	109	328	62	47	7.7	1.7
16	48	48	349	150	55	891	100	262	51	29	5.5	3.1
17	59	296	259	140	50	588	95	475	45	24	4.5	6.7
18	43	226	217	130	50	392	104	1290	39	21	3.3	5.9
19	40	142	175	120	50	385	202	560	172	17	2.7	3.9
20	37	107	214	120	48	403	328	345	98	16	2.7	2.7
21	32	104	202	110	48	582	378	259	64	13	2.1	1.9
22	29	113	157	110	48	496	268	196	50	13	1.4	1.9
23	27	93	135	110	48	324	208	170	40	14	1.6	2.1
24	25	89	127	110	46	287	187	199	33	30	1.4	1.9
25	23	75	229	2330	46	1080	235	157	29	27	1.3	2.0
26	23	76	190	2730	46	1020	268	127	214	19	1.3	1.6
27	24	73	160	854	46	1290	208	184	386	15	1.4	.90
28	23	75	130	480	44	576	172	91	1330	11	2.0	.80
29	21	59	110	338	---	374	152	78	296	9.4	20	1.4
30	20	102	100	265	---	272	142	71	165	8.2	19	1.2
31	18	---	90	220	---	226	---	78	---	20	41	---
TOTAL	1593	2515	9515	12852	2175	17032	6345	7069	4336	1442.6	360.9	127.30
MEAN	51.4	83.8	307	415	77.7	549	212	228	145	46.5	11.6	4.24
MAX	223	296	1740	2730	190	3570	590	1290	1330	190	41	30
MIN	18	16	90	80	44	44	95	71	29	8.2	1.3	.80
CFSM	.38	.63	2.29	3.10	.58	4.10	1.58	1.70	1.08	.35	.09	.03
IN.	.44	.70	2.64	3.57	.60	4.73	1.76	1.96	1.20	.40	.10	.04

CAL YR 1977 TOTAL 57004.60 MEAN 156 MAX 2200 MIN 3.3 CFSM 1.16 IN 15.83
WTR YR 1978 TOTAL 65362.80 MEAN 179 MAX 3570 MIN .80 CFSM 1.34 IN 18.15

03115400 LITTLE MUSKINGUM RIVER AT BLOOMFIELD, OH

LOCATION.--Lat 39°33'47", long 81°12'14", in sec. 22, T.3 N., R.6 W., Washington County, Hydrologic Unit 05030201, on left bank 400 ft (122 m) upstream from bridge on State Highway 260 at Bloomfield, 2.2 mi (3.5 km) downstream from Wilson Run.

DRAINAGE AREA.--210 mi² (544 km²).

PERIOD OF RECORD.--October 1958 to current year.

REVISED RECORDS.--WSP 1705: 1959.

GAGE.--Water-stage recorder. Datum of gage is 645.99 ft (196.898 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Water-quality data collected at this site 1964 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--20 years, 250 ft³/s (7.080 m³/s), 16.17 in/yr (411 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,200 ft³/s (600 m³/s) Mar. 5, 1963, gage height, 28.08 ft (8.559 m), from rating curve extended above 8,000 ft³/s (227 m³/s) on basis of velocity-area study and flow over road computations; no flow Sept. 18, 26, 27, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s (85.0 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 6	0300	4720	134	19.20	5.852	Mar. 15	0100	5680	161	20.60	6.279
Jan. 26	1800	*7030	199	*22.26	6.785	July 3	2300	3350	94.9	16.63	5.069

Minimum discharge, 1.4 ft³/s (0.040 m³/s) Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	14	1440	110	400	65	257	170	103	95	147	132
2	143	14	532	110	300	65	209	150	81	81	71	69
3	105	12	322	110	230	65	188	132	80	1780	42	40
4	55	14	267	105	190	65	187	150	97	1530	42	27
5	34	27	1630	103	170	64	225	353	73	382	42	21
6	28	31	2840	107	150	62	279	260	60	242	36	18
7	49	32	567	177	140	64	1000	206	63	165	52	13
8	61	350	340	870	130	64	589	230	160	152	80	9.3
9	196	177	645	2020	120	65	364	910	885	365	62	7.5
10	248	317	510	672	110	80	296	555	275	227	52	6.7
11	127	610	337	530	100	150	261	345	157	958	80	5.5
12	81	245	266	422	95	700	224	281	116	307	80	5.5
13	58	152	269	330	90	2560	186	560	188	185	80	9.0
14	44	112	752	270	85	4470	158	1170	121	460	62	10
15	33	89	988	230	80	3430	137	752	85	765	44	9.7
16	32	76	495	200	80	1120	123	472	68	310	33	8.2
17	66	885	347	185	75	888	112	442	60	206	25	13
18	71	725	287	170	75	531	123	662	50	142	20	18
19	69	305	230	150	75	426	311	785	180	103	16	16
20	73	197	312	140	75	435	819	455	110	78	14	11
21	62	170	392	140	70	433	976	332	80	65	11	8.6
22	49	197	300	140	70	510	689	260	50	55	9.0	8.2
23	43	180	230	140	70	362	419	218	40	45	7.5	6.0
24	36	165	200	140	70	302	336	345	30	42	6.4	5.3
25	30	140	263	1150	65	1420	304	407	25	62	5.3	4.3
26	30	135	233	5660	65	1510	368	260	31	53	5.3	3.0
27	24	114	195	3000	65	2050	315	197	537	44	4.3	3.1
28	20	107	160	1500	65	813	260	160	452	35	12	2.2
29	18	116	130	900	---	472	221	132	245	29	42	1.6
30	17	302	120	700	---	340	195	114	123	24	35	1.5
31	16	---	112	500	---	287	---	135	---	63	66	---
TOTAL	1941	6010	15731	20981	3310	23868	10131	11600	4625	9050	1283.8	493.2
MEAN	62.6	200	507	677	118	770	338	374	154	292	41.4	16.4
MAX	248	885	2840	5660	400	4470	1000	1170	885	1780	147	132
MIN	16	12	112	103	65	62	112	114	25	24	4.3	1.5
CFSM	.30	.95	2.41	3.22	.56	3.67	1.61	1.78	.73	1.39	.20	.08
IN.	.34	1.06	2.79	3.72	.59	4.23	1.79	2.05	.82	1.60	.23	.09

CAL YR 1977 TOTAL 85831.6 MEAN 235 MAX 4090 MIN 2.8 CFSM 1.12 IN 15.20
WTR YR 1978 TOTAL 109024.0 MEAN 299 MAX 5660 MIN 1.5 CFSM 1.42 IN 19.31

MUSKINGUM RIVER BASIN

03116000 TUSCARAWAS RIVER AT CLINTON, OH

LOCATION.--Lat 40°55'40", long 81°37'58", in NW 1/4 sec. 32, T.2 N., R.10 W., Summit County, Hydrologic Unit 05040001, on right bank 100 ft (30 m) downstream from highway bridge at Clinton, and 1 mi (2 km) upstream from Chippewa Creek.

DRAINAGE AREA.--174 mi² (451 km²).

PERIOD OF RECORD.--May 1926 to September 1978 (discontinued)

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 933.28 ft (284.464 m) National Geodetic Vertical Datum of 1912. Prior to Nov. 18, 1928, nonrecording gage at site 100 ft (30 m) upstream at datum 4.00 ft (1.219 m) higher. Nov. 18, 1928, to July 24, 1930, nonrecording gage at same site at present datum.

REMARKS.--Records fair except those for periods of no gage-height record, which are poor. Some water diverted through the Portage Lakes into the Ohio Canal at Long Lake 12 mi (19 km) upstream and 3 mi (5 km) south of Akron. Part of the diverted water flows through the Ohio Canal into the Cuyahoga River basin. Flow affected by industrial plants upstream from station and supplemented at times by diversion from Nimisila Reservoir, capacity, 6,500 acre-ft (8.01 hm³), since 1939. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--49 years, (1929-78), 188 ft³/s (4.191 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,700 ft³/s (76.5 m³/s) Aug. 8, 1935; maximum gage height, 17.00 ft (5.182 m) July 7, 1969 (backwater from Chippewa Creek); minimum daily discharge, 10 ft³/s (0.28 m³/s) Nov. 6, 1928.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,100 ft³/s (56.6 m³/s) Mar. 15; maximum gage height, Mar. 15, 14.56 ft (4.438 m), affected by backwater from Chippewa Creek; minimum daily discharge, 61 ft³/s (1.73 m³/s) Sept. 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	73	650	130	260	75	381	105	146	74	69	78
2	91	73	600	125	220	75	325	101	104	98	67	76
3	86	74	353	118	200	75	407	103	95	199	86	73
4	81	81	233	116	180	70	550	101	88	128	81	72
5	76	81	217	117	170	70	500	142	89	92	71	74
6	79	74	523	117	160	70	512	130	87	81	70	76
7	76	159	350	120	150	70	550	113	87	78	76	78
8	96	179	240	447	140	70	432	118	99	76	74	76
9	177	128	201	794	130	70	289	261	92	74	74	74
10	141	165	173	434	130	90	231	226	84	73	470	73
11	115	222	154	277	120	150	234	151	81	71	225	75
12	125	167	142	208	120	350	241	146	85	71	105	78
13	122	177	159	174	110	750	188	317	108	71	86	90
14	119	182	1170	154	110	1500	158	450	90	108	80	79
15	115	179	1700	142	110	2000	139	509	84	80	81	80
16	119	451	1870	130	110	1700	122	470	81	75	79	74
17	138	600	1370	126	110	1290	125	400	80	72	80	71
18	129	500	1060	130	100	908	127	350	93	70	79	73
19	127	290	832	125	100	740	293	180	378	69	79	72
20	133	190	634	124	100	832	450	170	182	69	78	71
21	131	180	565	132	100	934	600	234	102	70	77	69
22	101	204	384	124	100	1020	463	174	89	90	80	70
23	91	161	256	119	95	796	255	136	83	90	77	69
24	85	149	216	130	90	563	233	350	77	116	79	65
25	80	125	647	155	90	403	195	465	76	84	78	64
26	79	130	438	350	85	640	165	242	103	78	78	68
27	77	117	219	550	80	1080	145	145	112	76	74	65
28	73	117	161	500	80	934	122	117	88	101	79	61
29	72	119	145	450	---	659	111	105	78	74	78	61
30	72	182	140	350	---	450	107	123	76	71	79	63
31	73	---	132	300	---	354	---	251	---	69	83	---
TOTAL	3164	5529	15934	7268	3550	18788	8650	6885	3117	2648	2972	2168
MEAN	102	184	514	234	127	606	288	222	104	85.4	95.9	72.3
MAX	177	600	1870	794	260	2000	600	509	378	199	470	90
MIN	72	73	132	116	80	70	107	101	76	69	67	61

CAL YR 1977 TOTAL 75552 MEAN 207 MAX 1970 MIN 60
WTR YR 1978 TOTAL 80673 MEAN 221 MAX 2000 MIN 61

Note: No gage-height record Feb. 3 to Mar. 15.

03116200 CHIPPEWA CREEK AT EASTON, OH

LOCATION.--Lat 40°56'47", long 81°44'35", in SW 1/4 sec. 17, T.18 N., R.11 W., Wayne County, Hydrologic Unit 05040001, on left bank at downstream side of bridge on State Highway 585, 0.5 mi (0.8 km) southwest of Easton, and 1.5 mi (2.4 km) upstream from Red Run.

DRAINAGE AREA.--146 mi² (378 km²).

PERIOD OF RECORD.--January 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 934.40 ft (284.805 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1976; water-stage recorder and prior to June 10, 1960, nonrecording gage at datum 5.32 ft (1.622 m) higher.

REMARKS.--Records fair except those for winter periods, which are poor. Low flow slightly regulated by industry at Rittman 2.5 mi (4.0 km) upstream. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--18 years, 131 ft³/s (3.710 m³/s), 12.18 in/yr (309 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,500 ft³/s (354 m³/s) July 5, 1969, gage height, 16.02 ft (4.883 m); minimum daily, 3.2 ft³/s (0.091 m³/s) July 6, 1963.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959 reached a stage of 14.71 ft (4.319 m), discharge, 10,100 ft³/s (286 m³/s), by contracted-opening measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28.3 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 14	2300	*4280	121	*15.15	4.618	Mar. 15	---	2700	76.5	---	---
Jan. 26	1300	1230	34.8	11.34	3.456						

Minimum daily discharge, 13 ft³/s (0.37 m³/s) Sept. 25, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	27	822	105	200	65	203	65	110	31	21	21
2	44	27	576	100	190	65	140	60	73	48	21	22
3	43	27	325	95	170	65	223	56	60	153	40	22
4	39	32	227	90	160	60	345	57	52	92	36	20
5	35	38	232	85	150	60	434	106	52	57	24	20
6	39	37	516	80	140	60	426	69	46	49	23	20
7	40	59	330	77	130	60	515	74	49	42	31	21
8	56	92	190	426	120	60	338	71	60	39	31	20
9	129	63	170	681	110	60	233	199	52	36	28	20
10	107	85	150	400	110	100	191	174	41	33	472	19
11	69	143	130	300	100	170	188	113	37	32	163	19
12	57	92	120	200	100	300	192	108	43	30	57	20
13	51	102	200	170	100	500	144	260	63	29	36	24
14	46	117	2650	150	95	1400	118	484	44	35	28	23
15	43	113	3590	140	95	2700	102	399	38	29	29	25
16	42	273	2250	130	95	1680	90	463	36	25	26	21
17	49	530	1390	120	90	982	86	355	35	23	24	20
18	49	421	978	120	90	592	84	345	44	25	22	20
19	45	227	698	120	90	525	252	202	291	25	22	20
20	51	152	563	110	85	606	544	143	125	24	21	18
21	54	134	470	110	85	779	544	183	57	24	20	16
22	43	147	319	110	85	718	373	133	44	26	21	17
23	35	121	227	110	80	525	221	105	38	39	20	15
24	32	104	197	110	75	355	196	437	35	55	20	14
25	31	89	616	110	75	265	163	342	32	28	20	13
26	31	83	400	400	70	480	132	179	43	25	20	14
27	31	80	200	480	70	810	110	110	68	29	19	14
28	31	82	150	480	65	578	91	86	52	45	20	13
29	30	72	130	400	---	386	80	71	38	26	20	14
30	29	157	120	300	---	248	72	98	33	22	22	15
31	28	---	110	230	---	202	---	206	---	21	24	---
TOTAL	1449	3726	19046	6539	3025	15456	6840	5773	1793	1197	1381	560
MEAN	46.7	124	614	211	108	499	228	186	59.8	38.6	44.5	18.7
MAX	129	530	3590	681	200	2700	544	484	291	153	472	25
MIN	28	27	110	77	65	60	72	56	32	21	19	13
CFSM	.32	.85	4.21	1.45	.74	3.42	1.56	1.27	.41	.26	.31	.13
IN.	.37	.95	4.85	1.67	.77	3.94	1.74	1.47	.46	.30	.35	.14

CAL YR 1977 TOTAL 61695 MEAN 169 MAX 3590 MIN 25 CFSM 1.16 IN 15.72
WTR YR 1978 TOTAL 66785 MEAN 183 MAX 3590 MIN 13 CFSM 1.25 IN 17.02

03117000 TUSCARAWAS RIVER AT MASSILLON, OH

LOCATION.--Lat 40°46'13", long 81°31'27", in sec. 20 T.10 N., R.9 W., Stark County, Hydrologic Unit 05040001, on left bank at sewage-treatment works, 0.7 mi (1.1 km) south of Massillon, and 3 mi (5 km) downstream from Newman Creek.

DRAINAGE AREA.--518 mi² (1,342 km²).

PERIOD OF RECORD.--October 1937 to current year. Prior to April 1938 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 916.00 ft (279.197 m) National Geodetic Vertical Datum of 1912. Prior to Aug. 19, 1944, nonrecording gage at same site and datum.

REMARKS.--Records good. Diversion from basin and regulation at Portage Lakes (including Nimisila Reservoir since 1939). See REMARKS for station 03116000. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--41 years, 431 ft³/s (12.21 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,700 ft³/s (303 m³/s) July 5, 1969, gage height, 16.43 ft (5.008 m); minimum daily, 57 ft³/s (1.61 m³/s) Oct. 13, 14, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,320 ft³/s (179 m³/s) Dec. 15, gage height, 11.65 ft (3.551 m); (3.551 m); minimum daily, 108 ft³/s (3.06 m³/s) Aug. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	275	153	1700	377	674	217	984	308	598	268	122	135
2	296	151	1620	369	627	212	764	299	416	311	127	120
3	245	153	972	343	575	210	956	289	359	575	146	116
4	235	164	679	338	521	205	1570	289	323	521	203	116
5	208	181	755	328	478	200	1610	374	311	364	149	116
6	219	168	1460	328	453	198	1460	400	308	304	198	122
7	219	206	985	330	422	193	1700	340	323	270	166	129
8	261	358	701	382	398	193	1310	316	634	256	162	133
9	426	292	583	1760	377	198	860	481	652	248	149	124
10	424	308	531	1290	359	333	696	656	379	244	1070	118
11	318	452	490	880	346	464	656	472	323	236	717	120
12	278	355	462	678	333	876	706	385	316	232	287	124
13	270	350	488	566	323	1690	575	425	366	224	186	140
14	261	372	2900	505	323	4140	484	1080	356	300	146	166
15	247	358	6180	461	313	6010	422	1450	320	230	140	162
16	238	651	5980	428	313	5860	374	1480	316	200	129	142
17	268	1310	5020	400	308	4820	351	1300	308	190	124	129
18	270	1160	4030	392	301	3300	353	1100	333	170	120	135
19	261	723	2660	385	292	2160	540	850	1200	160	118	142
20	256	517	1850	379	289	2220	904	500	820	150	116	140
21	266	483	1530	374	287	2420	1710	685	450	149	114	146
22	235	522	1070	369	282	2940	1400	582	364	160	116	144
23	199	469	746	361	268	2380	828	467	320	246	120	146
24	190	431	642	356	265	1550	667	1040	301	311	120	140
25	177	386	1260	359	241	1130	610	1410	296	217	122	140
26	173	374	1270	537	232	1970	508	793	289	177	116	142
27	170	350	696	1540	224	3360	453	518	387	162	108	155
28	164	334	505	1400	222	3030	392	411	379	191	112	153
29	157	332	439	1100	---	1980	348	366	306	179	127	142
30	148	393	414	900	---	1230	323	403	277	162	127	171
31	148	---	392	778	---	956	---	996	---	142	160	---
TOTAL	7502	12456	49010	18993	10046	56645	24514	20465	12330	7549	5917	4108
MEAN	242	415	1581	613	359	1827	817	660	411	244	191	137
MAX	426	1310	6180	1760	674	6010	1710	1480	1200	575	1070	171
MIN	148	151	392	328	222	193	323	289	277	142	108	116

CAL YR 1977 TOTAL 191833 MEAN 526 MAX 6180 MIN 118
WTR YR 1978 TOTAL 229535 MEAN 629 MAX 6180 MIN 108

03117100 TUSCARAWAS RIVER AT NAVARRE, OH

LOCATION.--Lat 40°43'36", long 81°31'47", Stark County, Hydrologic Unit 05040001, on left bank at Navarre water treatment plant, 800 ft (244 m) upstream from bridge on Elton Road at Navarre, 3.5 mi (5.6 km) downstream from gaging station at Massillon, 1.2 mi (1.9 km) downstream from Pigeon Run, and just upstream from Wolf Creek.

DRAINAGE AREA.--534 mi² (1,383 km²).

PERIOD OF RECORD.--March 1968 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: March 1968 to current year.
pH: March 1968 to current year.
WATER TEMPERATURES: March 1968 to current year.
DISSOLVED OXYGEN: March 1968 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. Dissolved oxygen concentrations listed as 15.0 mg/L represent concentrations of 15.0 mg/L or higher due to instrument limitations. See records of daily discharge for gaging station at Massillon (station 03117000).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 16,700 micromhos Jan. 27, 1970; minimum, 210 micromhos Mar. 4, 1976.
pH: Maximum, 10.7 units Oct. 27, 1971; minimum, 3.9 units Oct. 26, 1969.
WATER TEMPERATURES: Maximum, 30.0°C June 27, 28, 1969, Aug. 25, 1975, July 7, 16, 20, 1977; minimum, 0.0°C on many days during winter periods.
DISSOLVED OXYGEN: Maximum, 15.0 mg/L or higher May 29-31, June 21, Aug. 3, 1977; minimum, 0.0 mg/L on many days during 1971 to 1973.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 3,960 micromhos Aug. 4; minimum, 270 micromhos Mar. 16.
pH: Maximum recorded, 8.1 units Nov. 12, 13, Apr. 15, 16; minimum recorded, 6.8 units May 31, July 18, Aug. 20.
WATER TEMPERATURES: Maximum, 28.5°C July 22; minimum, 0.0°C on many days during winter period.
DISSOLVED OXYGEN: Maximum, 14.4 mg/L Mar. 30; minimum, 1.8 mg/L Aug. 10.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	2880	1560	3300	2850	---	---	2430	2280	2100	1800	2400	2070
2	3450	2070	3360	2850	---	---	2520	2310	2100	1800	2370	1950
3	3030	2610	3240	2880	---	---	2520	2310	2040	1920	2520	2010
4	3390	3060	3300	2670	---	---	2670	2190	2280	1920	2520	2130
5	2970	2340	3360	2760	---	---	2460	2100	2220	2070	2430	990
6	2640	2250	3450	2490	---	---	2520	2280	2370	2190	2400	1050
7	2850	2610	3060	2610	---	---	2490	2190	2430	2100	2490	960
8	2640	2070	3810	2010	---	---	2310	1260	2460	2250	2280	1950
9	2280	1740	3270	2820	---	---	1230	1050	2490	2160	2310	2040
10	2250	1260	3600	2460	---	---	1470	1020	2490	2430	2400	2070
11	2730	1590	3840	2340	---	---	1620	1320	---	---	2490	1860
12	3000	2700	3210	2580	---	---	1800	1590	---	---	1830	1410
13	3030	2460	3660	3120	---	---	1920	1770	---	---	1410	930
14	2820	2610	3300	2970	---	---	1980	1830	---	---	1230	330
15	2970	2700	3090	2910	---	---	1980	1800	---	---	570	330
16	3060	2790	3270	1740	750	420	2010	1830	---	---	630	270
17	3060	2820	1740	1260	840	750	2010	1800	2850	2580	780	570
18	2910	2490	1620	1290	960	870	2070	1860	2820	2610	960	450
19	3000	2520	1620	1290	1080	960	2040	1890	3060	2670	1020	540
20	3030	2880	1620	1470	1290	1050	1950	1890	3000	2820	990	510
21	3000	2820	1740	1590	1320	1200	2040	1890	3030	2730	720	330
22	3030	2730	1890	1710	1410	1320	1980	1890	2940	2610	720	390
23	3600	2730	1920	1680	1470	1260	2130	1980	2940	2760	780	480
24	3720	3300	2400	1950	1620	1320	2340	1920	2700	2070	1050	480
25	3840	3570	2280	1890	1560	1080	2160	1950	2310	2040	1200	570
26	3570	2940	2490	2250	1710	1110	2190	1410	2370	2130	1140	450
27	3300	2790	2520	2340	1680	1410	1380	1230	2460	2220	720	510
28	3300	2610	2790	2340	1830	1620	1440	1320	2310	2100	720	330
29	3060	2580	2790	2550	1890	1830	1500	1350	---	---	960	420
30	3600	2550	2640	1530	2250	1830	1680	1380	---	---	1050	630
31	3240	2850	---	---	2400	2100	1950	1680	---	---	1290	1020
MONTH	3840	1260	3840	1260	2400	420	2670	1020	3060	1800	2520	270

03117100 TUSCARAWAS RIVER AT NAVARRE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1410	1110	1890	1710	3750	960	2490	2250	2970	2580	3060	2640
2	1410	780	2010	1770	3720	1470	2550	1680	3150	2820	2850	2370
3	1320	720	2010	1740	1800	1650	2490	1500	3030	2640	3090	2490
4	1470	990	2190	1680	2070	1710	3360	1380	3960	2580	3210	2850
5	1500	930	2280	1620	2190	1890	2940	1590	2430	2100	3420	2520
6	1200	690	2070	1470	2250	1950	2040	1740	2340	1320	3180	2880
7	1170	660	1650	1500	2220	1800	2160	1800	2340	1980	3420	2970
8	1290	990	1860	1590	2070	960	2130	1920	2760	2340	3330	2880
9	1320	1110	3420	1590	1560	870	2430	1980	2850	2160	3210	2910
10	1440	840	2340	2010	1740	1530	2430	2010	2580	510	3270	2850
11	1560	1350	2850	2430	2010	1710	2520	2220	3210	750	3210	2880
12	1680	1290	3270	1620	2160	1950	2640	2280	3270	1560	3240	2910
13	1560	1200	1800	960	2640	2160	2700	2340	1890	1620	3450	2940
14	1500	1320	990	750	2520	1830	2880	2400	2100	1830	3420	3000
15	1620	1440	1950	330	2070	1830	3240	1620	2460	1980	2640	1890
16	1710	1560	2010	1440	2220	2070	2100	1650	2550	2310	3150	2550
17	1800	1650	1470	600	2520	2220	2580	2130	2580	2190	2970	2400
18	2070	1710	1290	630	2490	1710	2670	2280	2790	2430	3240	2670
19	1920	1020	1350	1230	1890	840	2850	2490	2910	2310	3360	2520
20	1680	870	1530	1200	3180	1380	2940	2490	2970	2520	3540	2610
21	1650	1350	1500	1110	3450	1440	2850	2520	3150	2460	3210	2610
22	1290	630	1290	1170	1770	1620	3000	2610	3090	2580	3420	2580
23	1230	1020	1530	1290	1950	1680	3210	900	3180	2670	3300	2670
24	1320	630	1530	900	2040	1950	2970	1050	3060	2700	3390	2940
25	3180	1410	1770	1200	2130	2040	1740	1350	3270	2700	3180	2940
26	1710	1560	1650	1020	2250	2070	2160	1770	3690	2970	3450	3030
27	2010	1560	1440	1140	2520	1320	2430	2100	3240	2880	3750	3210
28	2100	1650	1530	1470	1740	1320	3330	2340	3240	2790	3660	3120
29	2340	1860	1710	1530	1830	1680	3210	1770	3240	2760	3540	3030
30	1890	1680	1830	1440	2250	1860	2370	2070	3210	2790	3630	3030
31	---	---	1440	870	---	---	2820	2400	2850	2280	---	---
MONTH	3180	630	3420	330	3750	840	3360	900	3960	510	3750	1890
YEAR	3960	270										

03117100 TASCARAWAS RIVER AT NAVARRE, OH--Continued

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.6	7.5	7.7	7.5	7.5	7.3					---	---
2	7.6	7.5	7.8	7.5	7.5	7.3					---	---
3	7.6	7.5	7.6	7.5	7.5	7.4					---	---
4	7.6	7.5	7.5	7.4	7.5	7.1					---	---
5	7.7	7.5	7.7	7.3	7.5	7.4					---	---
6	7.6	7.4	7.8	7.4	7.6	7.3					---	---
7	7.6	7.3	7.6	7.4	7.7	7.4					---	---
8	7.6	7.3	7.6	7.4	7.8	7.1					---	---
9	7.7	7.6	7.7	7.5	8.0	7.4					---	---
10	7.7	7.5	7.9	7.5	7.6	7.2					---	---
11	7.8	7.5	8.0	7.7	7.6	7.2					---	---
12	7.8	7.6	8.1	7.8	7.6	7.3					---	---
13	7.9	7.8	8.1	7.8	7.6	7.5					---	---
14	7.9	7.5	7.9	7.8	7.6	7.3					---	---
15	7.9	7.8	7.8	7.2	7.8	7.5					---	---
16	7.9	7.7	7.8	7.4	7.8	7.3					---	---
17	8.0	7.7	7.6	7.5	7.6	7.3					---	---
18	7.9	7.7	7.6	7.5	7.6	7.3					---	---
19	7.9	7.6	7.6	7.4	7.5	7.3					---	---
20	7.9	7.8	7.6	7.5	7.5	7.3					---	---
21	7.9	7.6	---	---	7.6	7.3					---	---
22	7.8	7.7	---	---	7.5	7.3					---	---
23	7.8	7.5	---	---	7.5	7.2					---	---
24	7.7	7.4	---	---	---	---					---	---
25	7.7	7.5	---	---	---	---					---	---
26	7.7	7.5	---	---	---	---					---	---
27	7.7	7.5	---	---	---	---					---	---
28	7.7	7.5	---	---	---	---					---	---
29	7.8	7.5	---	---	---	---					---	---
30	7.9	7.4	---	---	---	---					---	---
31	7.9	7.4	---	---	---	---					7.6	7.4
MONTH	8.0	7.3	8.1	7.2	8.0	7.1					7.6	7.4

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.7	7.3	---	---	7.4	7.0	7.5	7.3	7.8	7.4	7.6	7.4
2	7.8	7.5	---	---	7.4	7.1	7.5	7.2	7.7	7.4	7.7	7.3
3	7.8	7.4	---	---	7.4	7.2	7.5	7.4	7.7	7.4	8.0	7.2
4	7.8	7.5	---	---	7.4	7.3	7.5	7.2	7.6	7.1	7.8	7.4
5	7.6	7.3	---	---	7.4	7.1	7.5	7.3	7.8	7.5	7.8	7.5
6	7.6	7.5	---	---	7.5	7.1	7.5	7.2	7.5	7.3	7.9	7.3
7	7.6	7.0	---	---	7.4	7.2	7.5	7.2	7.5	7.4	---	---
8	7.7	7.5	---	---	7.3	7.2	7.5	7.0	7.5	7.3	---	---
9	7.8	7.6	---	---	7.3	7.1	7.6	7.4	7.6	7.4	---	---
10	7.7	7.5	7.8	7.6	7.5	7.1	7.7	7.3	7.4	7.3	---	---
11	7.8	7.6	8.0	7.6	7.5	7.3	7.6	7.5	7.5	7.4	---	---
12	7.8	7.5	7.8	7.7	7.7	7.1	7.7	7.3	7.4	7.2	---	---
13	7.9	7.6	7.7	7.4	7.5	7.1	7.7	7.3	7.4	7.3	7.6	7.2
14	8.0	7.6	7.6	7.5	7.5	7.3	8.0	7.4	7.5	7.4	7.5	7.3
15	8.1	7.6	7.7	7.4	7.5	7.3	7.7	7.4	7.7	7.3	7.6	6.9
16	8.1	7.8	7.7	7.6	7.5	7.3	7.7	7.2	7.6	7.3	7.6	7.4
17	8.0	7.8	7.6	7.2	7.5	7.2	8.0	7.3	7.7	7.4	7.5	7.3
18	7.9	7.7	7.6	7.4	7.6	7.1	7.6	6.8	7.7	7.4	7.4	7.0
19	7.9	7.5	7.6	7.4	7.2	6.9	7.7	7.2	7.8	7.1	7.5	7.2
20	7.6	7.4	7.6	7.3	7.4	7.2	7.7	7.3	7.8	6.8	7.7	7.3
21	7.6	7.5	7.6	7.5	7.4	7.2	7.7	7.3	7.7	7.5	7.7	7.3
22	7.6	7.4	7.7	7.4	7.4	7.0	7.8	7.4	7.8	7.5	7.6	7.3
23	7.7	7.5	7.7	7.4	7.4	7.1	7.7	7.4	7.8	7.5	7.5	7.4
24	7.8	7.6	7.6	7.4	7.5	7.3	7.6	7.3	7.8	7.4	7.7	7.4
25	7.8	7.7	7.5	7.3	7.5	7.4	7.5	7.4	7.6	7.0	7.6	7.4
26	8.0	7.7	7.6	7.4	7.5	7.2	7.7	7.4	7.7	7.2	7.7	7.5
27	8.0	7.7	7.6	7.4	7.4	7.3	7.7	7.3	7.7	7.4	7.7	7.3
28	8.0	7.6	7.6	7.4	7.4	7.0	7.6	7.3	7.7	7.3	7.7	7.3
29	8.0	7.4	7.6	7.5	7.4	7.3	7.5	7.4	7.7	7.4	7.7	7.4
30	8.0	7.5	7.7	7.5	7.7	7.2	7.9	7.4	7.5	7.3	7.6	7.1
31	---	---	7.5	6.8	---	---	7.9	7.5	7.5	7.4	---	---
MONTH	8.1	7.0	8.0	6.8	7.7	6.9	8.0	6.8	7.8	6.8	8.0	6.9
YEAR	8.1	6.8										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03117100 TUSCARAWAS RIVER AT NAVARRE, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	18.5	17.5	14.0	12.0	6.0	5.5	2.5	2.0	1.0	.0	5.0	3.0
2	17.5	16.0	15.5	12.0	6.0	5.0	2.0	1.0	2.0	.5	4.0	1.5
3	15.5	14.0	16.5	14.0	5.0	4.5	1.5	.0	2.0	1.0	3.5	2.0
4	15.5	13.0	17.5	16.0	4.5	4.0	2.0	.0	2.0	.0	4.0	2.0
5	14.5	13.0	18.5	16.5	4.0	2.0	3.5	1.5	2.0	.5	4.0	1.0
6	15.5	13.5	19.0	17.5	2.0	1.5	4.5	4.0	2.0	.0	4.5	2.0
7	14.5	12.5	19.0	17.5	1.5	.0	5.0	4.0	1.0	.0	4.5	2.0
8	14.0	13.0	18.0	17.0	1.0	.0	5.0	2.0	2.0	.0	5.5	3.0
9	13.5	12.0	18.0	17.0	1.0	.0	2.0	.0	2.5	.5	7.0	3.5
10	13.5	11.5	17.5	13.0	.0	.0	.0	.0	.5	.0	8.0	4.0
11	13.0	11.0	13.0	9.5	.5	.0	.5	.0	---	---	6.5	4.0
12	11.5	10.5	9.0	6.0	1.5	.0	1.0	.0	---	---	4.5	2.5
13	11.5	10.5	6.5	5.5	3.0	1.5	2.0	.5	---	---	3.0	1.5
14	11.0	9.5	5.5	4.5	3.0	.5	2.0	1.0	---	---	2.0	.5
15	12.0	9.0	6.5	5.0	1.5	.5	1.5	.0	---	---	1.0	.5
16	11.5	10.0	8.5	6.5	2.0	1.0	1.0	.0	---	---	1.5	.5
17	10.5	8.5	9.0	8.5	3.0	1.5	1.0	.5	4.5	2.5	1.5	.5
18	12.0	9.0	8.5	7.0	4.0	2.5	2.5	1.0	3.5	1.5	2.5	.5
19	13.0	10.5	7.5	6.5	4.5	4.0	1.5	1.0	3.0	.0	4.0	2.0
20	13.5	12.0	8.5	7.0	4.5	4.0	1.5	.5	3.0	.0	4.0	3.0
21	14.0	11.5	9.5	8.5	4.0	2.5	2.0	.5	3.0	.0	5.5	4.0
22	14.5	12.0	8.5	7.5	2.5	1.5	2.5	1.0	3.0	.5	5.5	4.0
23	13.5	12.5	8.0	7.5	2.0	1.5	2.0	.0	3.5	.5	6.5	5.5
24	15.0	12.0	8.0	7.5	4.0	2.0	2.5	.0	3.5	1.5	6.5	5.5
25	15.0	13.0	7.5	6.5	4.5	1.5	4.0	2.5	4.0	3.0	5.5	4.0
26	17.0	14.0	6.5	4.0	1.5	.0	3.5	.0	3.5	2.5	4.5	3.5
27	16.5	15.0	4.0	2.5	1.0	.0	.0	.0	4.5	2.0	4.5	4.0
28	16.5	15.0	3.5	2.0	.5	.0	.0	.0	5.0	2.0	6.0	4.0
29	15.5	13.0	3.5	2.0	2.0	.5	.5	.0	---	---	7.5	5.5
30	14.5	12.0	6.0	3.5	2.0	1.5	1.0	.0	---	---	8.5	6.0
31	14.5	11.5	---	---	3.0	1.5	1.0	.0	---	---	10.5	7.5
MONTH	18.5	8.5	19.0	2.0	6.0	.0	5.0	.0	5.0	.0	10.5	.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13.0	10.0	16.5	12.5	24.5	21.0	24.6	21.0	25.0	20.0	23.0	18.5
2	11.5	9.0	16.5	12.0	25.0	22.0	21.0	18.5	25.5	21.0	23.5	18.5
3	9.0	7.5	17.0	12.0	24.0	21.5	19.0	18.5	24.5	22.0	22.5	18.5
4	11.0	8.0	14.5	13.0	21.0	18.5	19.0	18.0	25.0	21.5	23.0	19.0
5	12.5	10.5	12.5	11.5	21.5	18.0	21.0	18.0	23.0	21.0	23.5	18.5
6	11.5	10.5	12.0	11.0	22.0	17.5	24.0	19.0	22.0	20.5	24.5	19.5
7	12.5	9.5	13.5	10.5	20.5	19.5	25.5	21.5	23.5	21.0	25.0	20.5
8	13.5	11.5	14.0	12.5	20.5	19.0	25.0	23.0	24.5	21.0	26.0	21.0
9	12.0	10.5	16.0	13.5	21.0	17.5	26.0	22.0	25.0	21.5	25.0	22.5
10	13.5	10.0	15.5	14.5	23.0	18.5	24.0	22.0	23.0	20.5	25.0	21.5
11	14.5	13.5	17.5	13.5	24.0	19.5	23.0	20.0	22.5	20.5	24.5	22.0
12	15.0	12.5	17.0	16.0	24.5	21.5	23.5	18.5	24.0	21.5	24.0	22.0
13	15.0	13.0	16.5	15.0	22.0	18.0	22.5	19.0	25.5	21.0	22.0	20.0
14	14.5	12.0	15.0	13.5	19.5	16.0	25.0	20.5	26.0	22.5	22.5	19.5
15	14.0	11.0	13.0	12.5	19.5	16.0	26.0	22.0	26.5	23.0	23.5	20.0
16	14.0	10.0	14.0	13.0	20.5	17.5	25.5	23.0	25.5	23.5	23.0	20.5
17	15.0	10.0	14.5	14.0	23.0	19.5	26.0	20.5	27.0	22.5	22.5	20.5
18	12.5	11.5	16.5	14.5	25.0	21.5	25.5	20.0	27.0	22.0	24.0	21.0
19	13.5	11.0	20.5	16.0	23.5	21.0	26.5	21.0	26.5	23.0	25.5	22.0
20	12.0	10.0	21.5	19.0	24.0	21.5	28.0	22.5	26.0	21.5	26.5	23.0
21	9.5	8.5	20.5	18.5	25.0	22.5	28.0	23.5	25.0	20.5	25.5	23.0
22	10.5	7.5	19.0	16.5	24.0	20.5	28.5	24.5	25.0	20.0	23.5	20.0
23	10.5	9.0	18.0	17.0	24.0	19.5	27.5	24.0	25.0	20.5	21.0	17.5
24	12.5	10.0	17.0	16.5	24.5	20.5	25.0	23.0	25.5	20.5	20.5	17.0
25	12.5	11.5	19.5	16.5	25.0	21.5	25.5	23.0	24.5	22.0	19.5	16.5
26	14.0	11.5	22.0	19.0	23.0	21.5	26.0	23.5	25.5	21.0	19.0	15.0
27	16.0	11.5	24.0	20.5	24.5	21.5	25.0	23.5	24.5	21.5	19.5	15.0
28	17.0	12.5	26.0	21.0	26.0	22.0	26.0	22.0	24.5	22.0	18.5	15.5
29	17.5	13.5	27.0	22.0	27.0	23.0	24.0	21.5	25.0	22.0	17.5	13.5
30	18.0	14.0	26.0	23.0	27.0	23.5	23.5	21.5	23.5	21.0	18.0	14.5
31	---	---	23.5	22.0	---	---	24.0	20.5	21.5	19.5	---	---
MONTH	18.0	7.5	27.0	10.5	27.0	16.0	28.5	18.0	27.0	19.5	26.5	13.5
YEAR	28.5	.0										

MUSKINGUM RIVER BASIN

03117100 TUSCARAWAS RIVER AT NAVARRE, OH--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	5.8	4.6	---	---	10.3	9.2	12.0	11.8	10.5	10.2	10.5	9.8
2	5.3	4.8	---	---	9.7	9.1	12.4	12.0	10.3	10.2	10.5	9.9
3	6.1	4.5	---	---	10.1	9.6	12.7	12.4	10.3	10.1	10.6	10.0
4	6.2	5.5	---	---	10.5	10.1	12.6	12.4	10.5	10.2	10.8	9.5
5	5.8	5.2	---	---	11.7	10.4	12.5	11.9	10.4	10.0	10.7	9.4
6	5.2	4.7	---	---	11.8	11.5	10.5	10.3	10.2	10.0	10.7	9.9
7	4.8	4.2	---	---	12.4	11.8	10.4	10.0	10.2	9.9	10.8	10.0
8	4.4	4.1	---	---	12.2	11.8	10.9	10.2	10.0	9.5	10.7	9.6
9	4.4	4.0	---	---	12.0	11.8	11.5	11.0	10.6	9.8	10.5	9.2
10	4.2	3.6	---	---	11.9	11.8	11.6	11.3	10.7	10.5	10.2	9.1
11	4.2	3.9	---	---	12.0	11.7	11.5	11.1	---	---	9.6	8.8
12	4.3	3.7	---	---	11.7	11.5	11.1	10.8	---	---	9.6	8.8
13	4.9	3.8	---	---	11.5	11.3	10.8	10.6	---	---	10.4	9.6
14	4.9	4.2	---	---	13.4	11.3	10.8	10.7	---	---	10.8	10.3
15	5.1	4.4	---	---	12.2	11.5	10.9	10.4	---	---	10.7	10.5
16	5.3	4.5	---	---	11.7	11.5	11.1	10.7	---	---	10.7	10.4
17	5.8	4.8	7.9	7.5	11.5	11.0	11.0	10.8	10.4	10.1	10.4	10.2
18	6.0	5.0	8.7	7.8	11.0	10.5	10.7	10.3	10.4	10.1	10.3	9.9
19	7.2	4.6	9.2	8.7	10.6	10.4	10.5	10.2	10.5	10.1	10.1	9.8
20	7.7	6.0	9.4	8.9	10.7	10.4	10.6	10.5	10.4	9.8	10.2	10.0
21	8.3	6.3	9.0	8.7	11.3	10.7	10.6	10.2	10.2	9.9	10.2	9.7
22	8.1	6.1	9.0	8.6	12.0	11.3	10.6	10.1	10.4	10.0	10.0	9.8
23	7.7	5.9	9.0	8.7	12.1	11.8	10.6	10.5	10.2	9.8	9.8	9.4
24	8.3	6.2	8.7	8.0	12.0	11.5	10.5	10.0	10.5	9.9	9.6	9.3
25	8.2	6.3	8.3	7.9	11.7	11.3	10.4	9.4	10.5	10.0	10.2	9.6
26	8.5	6.2	9.3	8.0	12.5	11.8	11.1	9.5	10.7	10.1	10.7	10.2
27	7.0	4.8	9.7	9.2	12.5	12.1	11.3	10.7	10.6	10.0	10.5	10.0
28	---	---	10.2	9.8	12.2	11.8	10.7	10.3	10.6	9.9	10.2	9.9
29	---	---	10.2	9.9	12.0	11.7	10.4	10.2	---	---	9.9	9.5
30	---	---	10.3	9.4	11.9	11.7	10.5	10.3	---	---	9.9	9.4
31	---	---	---	---	11.9	11.8	10.5	10.3	---	---	9.7	9.1
MONTH	8.5	3.6	10.3	7.5	13.4	9.1	12.7	9.4	10.7	9.5	10.8	8.8

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.1	8.7	12.6	7.5	3.9	3.1	6.2	3.6	11.5	4.0	---	---
2	9.6	8.6	12.0	7.5	4.9	2.9	4.8	3.2	13.0	4.4	---	---
3	10.3	9.3	12.0	7.4	5.8	3.5	4.5	3.6	8.5	4.3	---	---
4	9.9	9.2	9.0	7.0	5.6	4.0	3.9	3.4	7.4	4.1	---	---
5	9.1	8.7	7.7	6.3	5.6	4.2	5.0	3.7	7.7	4.1	---	---
6	9.4	8.9	8.1	6.1	6.2	4.4	5.4	3.8	5.2	4.1	---	---
7	9.6	9.1	10.0	6.7	5.6	2.5	5.7	3.4	6.8	4.0	---	---
8	9.2	8.9	7.6	6.7	5.3	2.6	6.4	3.3	6.5	3.7	---	---
9	9.8	8.9	7.8	4.8	5.6	5.1	7.9	3.2	6.9	3.5	---	---
10	9.8	8.6	6.8	4.6	6.9	4.7	7.2	3.7	4.9	1.8	---	---
11	8.5	7.7	9.1	5.7	7.8	4.6	8.0	4.2	3.9	3.4	---	---
12	8.9	7.2	6.8	5.0	8.4	4.4	7.5	4.5	4.3	3.3	---	---
13	9.6	7.7	6.3	5.3	5.5	4.2	8.0	3.9	5.6	3.5	---	---
14	10.4	7.9	7.0	6.2	6.4	3.8	10.7	4.4	6.6	3.7	---	---
15	10.8	8.1	7.7	7.0	6.5	4.5	6.7	3.8	9.1	4.2	---	---
16	11.5	8.1	7.1	6.8	5.8	3.9	7.9	3.5	8.9	4.2	---	---
17	11.5	7.9	7.5	7.0	6.8	3.8	12.8	4.3	9.6	4.1	---	---
18	9.3	7.9	7.5	5.8	7.0	3.7	12.4	5.2	9.9	4.2	---	---
19	9.4	7.5	6.8	5.9	5.0	2.5	12.6	5.1	10.0	3.6	---	---
20	8.0	7.5	7.3	5.5	3.2	2.8	11.8	4.1	10.4	3.6	11.0	3.3
21	8.7	8.0	6.4	5.5	4.6	2.8	11.3	3.5	10.0	4.2	10.8	3.0
22	9.6	8.7	7.1	5.4	6.1	3.5	10.3	2.9	9.4	4.4	7.3	2.8
23	10.0	8.7	6.5	6.0	6.5	3.8	8.0	3.3	10.7	4.2	8.4	3.2
24	10.7	8.4	6.3	4.8	7.9	3.8	6.0	3.2	9.1	3.6	8.6	3.4
25	9.6	7.5	5.4	4.9	9.7	4.1	5.9	2.8	6.5	3.5	8.2	3.5
26	11.0	7.6	6.5	5.3	6.0	3.5	7.2	3.1	8.9	3.2	8.6	3.7
27	11.5	7.5	6.2	5.2	5.0	3.1	9.0	3.4	8.4	3.3	9.1	3.8
28	12.8	7.1	5.9	4.5	6.1	3.2	7.7	3.8	7.1	2.7	9.0	3.8
29	12.8	7.2	6.7	4.3	6.1	3.2	6.0	2.9	---	---	9.0	3.9
30	14.4	7.5	7.5	4.1	9.2	3.2	9.8	3.2	---	---	9.1	4.2
31	---	---	4.6	3.8	---	---	11.3	4.2	---	---	---	---
MONTH	14.4	7.1	12.6	3.8	9.7	2.5	12.8	2.8	13.0	1.8	11.0	2.8
YEAR	14.4	1.8										

03117500 SANDY CREEK AT WAYNESBURG, OH

LOCATION.--Lat 40°40'21", long 81°15'36", in sec. 21, T.17 N., R.7 W., Stark County, Hydrologic Unit 05040001, on upstream side of left pier of bridge on State Highway 183 in Waynesburg, 300 ft (91 m) downstream from Little Sandy Creek, and 0.6 mi (1.0 km) upstream from Indian Run.

DRAINAGE AREA.--253 mi² (655 km²).

PERIOD OF RECORD.--October 1938 to current year. Prior to December 1938 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 923: 1939-40. WSP 1555: 1940(M), 1943(M), 1947(M), 1952, 1956(M). WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 955.00 ft (291.084 m) National Geodetic Vertical Datum of 1912.

REMARKS.--Records good except those for winter periods, which are poor. Water-quality data collected at this site 1964 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--40 years, 264 ft³/s (7.476 m³/s), 14.17 in/yr (360 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,000 ft³/s (425 m³/s) Jan. 22, 1959, gage height, 10.05 ft (3.063 m), from rating curve extended above 8,000 ft³/s (227 m³/s) on basis of contracted-opening and flow-over-road measurement of peak flow; minimum, 6.9 ft³/s (0.20 m³/s) Sept. 12, 13, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,800 ft³/s (51.0 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 6	1030	2170	61.5	5.25	1.600	Mar. 15	1130	*4440	126	*7.70	2.347
Dec. 15	1030	4090	116	7.46	2.274						

Minimum discharge, 48 ft³/s (1.36 m³/s) Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	473	128	1020	276	450	150	540	207	299	133	78	319
2	933	128	776	273	400	150	444	193	245	185	71	183
3	626	125	588	253	370	140	550	180	299	435	68	128
4	438	123	531	237	340	140	830	172	248	361	67	110
5	311	123	686	228	330	140	821	228	204	245	62	99
6	293	118	1950	220	310	130	722	231	177	193	161	91
7	279	123	1400	228	290	130	794	204	172	162	179	84
8	290	154	1000	492	270	130	658	188	531	146	288	77
9	531	146	700	812	260	140	534	779	1140	141	192	72
10	547	226	600	600	250	160	492	879	1530	130	895	69
11	394	434	550	450	240	220	469	557	915	117	812	66
12	328	279	500	400	230	500	450	422	560	107	320	65
13	279	234	897	360	230	1010	373	463	413	102	213	81
14	247	223	1830	330	220	2300	314	686	323	248	167	88
15	223	212	3770	300	220	4190	282	682	245	210	142	127
16	207	262	2600	290	210	2920	262	763	210	151	128	130
17	201	634	1460	280	210	1550	245	781	191	123	121	103
18	196	634	1020	270	210	1050	237	1110	188	109	111	89
19	188	460	749	260	200	825	331	1020	672	104	104	82
20	172	376	665	260	200	740	602	865	544	97	99	77
21	162	554	679	250	200	745	537	740	373	92	97	74
22	151	527	547	250	190	740	450	595	282	121	89	71
23	143	419	479	240	190	675	376	482	223	126	83	70
24	136	373	454	240	180	563	364	524	188	208	77	65
25	138	337	524	300	170	508	349	595	164	143	73	61
26	143	317	444	609	160	784	317	441	162	114	69	58
27	141	293	382	825	160	1380	288	355	210	101	67	56
28	138	262	323	700	150	1290	259	305	250	95	69	53
29	133	242	296	600	---	1060	237	267	207	92	76	50
30	130	320	288	550	---	696	223	237	156	86	93	54
31	128	---	282	500	---	560	---	267	---	82	266	---
TOTAL	8691	8786	27990	11883	6840	25686	13350	15418	11321	4759	5337	2752
MEAN	280	293	903	383	244	829	445	497	377	154	172	91.7
MAX	933	634	3770	825	450	4190	830	1110	1530	435	895	319
MIN	128	118	282	220	150	130	223	172	156	82	62	50
CFSM	1.11	1.16	3.57	1.51	.96	3.28	1.76	1.96	1.49	.61	.68	.36
IN.	1.28	1.29	4.12	1.75	1.01	3.78	1.96	2.27	1.66	.70	.78	.40

CAL YR 1977 TOTAL 122843 MEAN 337 MAX 3770 MIN 41 CFSM 1.33 IN 18.06
WTR YR 1978 TOTAL 142813 MEAN 391 MAX 4190 MIN 50 CFSM 1.55 IN 21.00

03118000 MIDDLE BRANCH NIMISHILLEN CREEK AT CANTON, OH

LOCATION.--Lat 40°50'29", long 81°21'14" in NE 1/4 sec. 27, T.11 N., R.8 W., Stark County, Hydrologic Unit 05040001, on right bank at downstream side of bridge on Martindale Road, 2.4 mi (3.9 km) upstream from mouth, and 0.5 mi (0.8 km) northeast of Canton.

DRAINAGE AREA.--43.1 mi² (112 km²).

PERIOD OF RECORD.--September 1941 to current year.

REVISED RECORDS.--WSP 1033: 1942(M), 1943(P), 1944(M). WSP 1305: 1946(M). WSP 1143: 1948. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,046.60 ft (319.004 m) National Geodetic Vertical Datum of 1912.

REMARKS.--Records good except those for period of no gage-height record, which is poor. Part of municipal water supply for city of Canton is pumped from its northeast well field; a portion of pumpage is believed to be derived from creek as recharge to aquifer supplying well field. Mean pumpage for water year 1977, 12.7 ft³/s (0.36 m³/s). At times low flow regulated by small pools above station. WaterQuality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--37 years, 34.6 ft³/s (0.980 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,470 ft³/s (70.0 m³/s) Jan. 22, 1959, gage height, 6.50 ft (1.981 m), from rating curve extended above 1,600 ft³/s (45.3 m³/s) on basis of contracted-opening measurement of peak flow; minimum daily, 0.2 ft³/s (0.006 m³/s) Nov. 9, 1944, Sept. 19, 1962.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft³/s (11 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 15	0700	*880	24.9	*6.04	1.841	Aug. 11	0200	418	11.8	4.69	1.430
Mar. 15	0200	799	22.6	5.89	1.795						

Minimum daily discharge, 11 ft³/s (0.31 m³/s) Mar. 4-8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	18	247	30	50	13	73	31	51	20	18	70
2	72	18	129	28	46	12	54	31	41	28	19	40
3	41	18	62	28	40	12	92	31	37	71	22	30
4	32	18	49	28	39	11	114	29	29	47	21	25
5	26	18	72	28	36	11	111	38	26	32	18	22
6	26	17	243	28	34	11	90	35	24	26	79	20
7	28	26	109	29	32	11	134	30	25	23	90	18
8	33	31	92	112	30	11	84	31	80	24	85	17
9	114	23	51	174	28	12	60	68	225	23	43	16
10	100	38	46	80	26	15	52	53	98	20	289	15
11	48	78	42	86	26	22	55	38	51	20	325	15
12	35	40	35	68	24	78	59	35	39	18	70	16
13	28	38	43	52	24	167	46	43	36	18	50	19
14	26	39	388	46	22	463	40	68	31	105	40	25
15	24	35	768	41	22	635	39	79	27	146	32	26
16	23	60	302	38	20	247	38	108	25	53	29	20
17	23	182	168	36	19	159	36	94	24	32	27	16
18	23	122	132	36	18	126	36	127	22	25	25	16
19	22	50	108	36	17	128	54	81	80	22	24	16
20	22	35	94	34	17	129	213	56	52	20	22	15
21	22	46	94	34	16	145	126	68	33	19	21	15
22	16	64	67	34	15	151	90	52	27	19	20	15
23	19	39	56	35	15	100	64	42	23	32	19	15
24	18	35	53	39	14	77	59	98	22	100	17	13
25	20	28	101	47	14	72	52	140	23	46	16	13
26	20	28	59	138	14	173	79	76	29	28	16	13
27	20	23	42	156	13	249	48	50	30	22	15	13
28	19	22	38	140	13	152	40	40	34	24	16	12
29	19	20	34	100	---	97	36	35	25	20	19	12
30	18	43	32	60	---	75	35	39	21	18	50	13
31	17	---	31	55	---	70	---	92	---	17	60	---
TOTAL	990	1252	3787	1878	684	3674	2109	1838	1290	1118	1597	591
MEAN	31.9	41.7	122	60.6	24.4	119	70.3	59.3	43.0	36.1	51.5	19.7
MAX	114	182	768	174	50	635	213	140	225	146	325	70
MIN	16	17	31	28	13	11	35	29	21	17	15	12

CAL YR 1977 TOTAL 16572 MEAN 45.4 MAX 768 MIN 10
WTR YR 1978 TOTAL 20808 MEAN 57.0 MAX 768 MIN 11

Note: No gage-height record Aug. 11 to Sept. 15.

03118500 MINISHILLEN CREEK AT NORTH INDUSTRY, OH

LOCATION.--Lat 40°44'03", long 81°21'08", in sec. 35, T.10 N., R.8 W., Stark County, Hydrologic Unit 05040001, on left bank just downstream from railroad bridge, 1 mi (2 km) southeast of North Industry, and 3 mi (5 km) downstream from Sherrick Run.

DRAINAGE AREA.--175 mi² (453 km²).

PERIOD OF RECORD.--October 1921 to current year.

REVISED RECORDS.--WSP 1113: 1924-30, 1932-37, 1938(M), 1939-40, 1943(M), 1945(P). WSP 1555: 1929, 1935, 1937(M), 1940(M), 1950(M).

GAGE.--Water-stage recorder. Datum of gage is 970.77 ft (295.891 m) National Geodetic Vertical Datum of 1912. Prior to Dec. 13, 1923, nonrecording gage at site 1 mi (2 km) upstream at different datum.

REMARKS.--Records good except period of no gage-height record, which is poor. Low flow slightly regulated by plants at Canton. Records include diversion from Sugar Creek well field. Mean pumpage for the 1976 water year, 16.0 ft³/s (0.45 m³/s). See REMARKS for station 03124500. Water-quality data collected at this site 1964 to 1969, 1975, 1977.

AVERAGE DISCHARGE.--57 years, 178 ft³/s (5.041 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,600 ft³/s (244 m³/s) Jan. 21, 1959, gage height, 11.29 ft (3.441 m), from rating curve extended above 6,500 ft³/s (184 m³/s) on basis of slope-area measurement of peak flow; minimum, 3.6 ft³/s (0.10 m³/s) Sept. 2, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42.5 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 14	1900	*4200	119	*7.75	2.362	Mar. 27	0400	1630	46.2	4.57	1.393
Mar. 14	2030	3880	110	7.42	2.262	June 9	0230	1800	51.0	4.82	1.469

Minimum daily, 80 ft³/s (2.27 m³/s) Sept. 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	626	147	1080	205	281	176	324	210	225	138	95	500
2	403	148	509	201	273	167	267	208	201	410	95	300
3	275	150	366	189	266	174	602	211	186	328	90	220
4	229	150	306	192	251	165	541	238	161	221	90	190
5	196	147	810	210	248	156	501	297	160	189	130	160
6	270	144	1210	215	247	165	473	235	156	168	200	140
7	208	209	459	221	238	165	555	211	205	158	270	130
8	351	195	324	671	245	172	366	276	629	253	320	120
9	831	171	301	652	244	198	299	502	1040	145	450	120
10	440	452	249	322	220	252	295	300	335	142	1050	110
11	288	340	243	337	177	321	331	246	215	135	1000	110
12	236	248	240	292	173	720	306	247	222	128	600	120
13	213	245	356	280	178	979	260	375	207	126	350	130
14	193	233	2780	272	184	2850	239	484	178	405	270	160
15	179	225	2400	254	174	2150	223	495	164	311	230	200
16	188	394	940	236	176	818	210	448	159	181	200	190
17	190	972	612	239	177	558	216	534	151	150	180	170
18	176	498	505	241	171	422	243	359	407	135	170	140
19	168	303	432	233	163	418	366	315	607	126	160	115
20	164	247	456	230	165	453	720	328	250	120	150	108
21	162	532	415	228	170	524	464	260	200	120	140	127
22	150	404	328	222	167	497	357	227	174	150	130	118
23	140	305	291	209	162	369	294	233	159	180	130	98
24	148	260	292	208	170	308	299	514	146	250	120	89
25	151	239	500	287	162	404	267	429	174	160	120	85
26	156	240	279	755	162	847	279	283	258	140	110	85
27	153	203	236	604	169	1270	242	226	292	120	110	85
28	146	205	213	504	176	582	226	193	207	120	120	80
29	139	195	213	377	---	401	213	179	160	110	130	80
30	133	496	210	326	---	328	206	260	148	100	300	90
31	143	---	203	300	---	355	---	346	---	100	450	---
TOTAL	7445	8697	17758	9712	5589	17364	10184	9669	7776	5519	7960	4370
MEAN	240	290	573	313	200	560	339	312	259	178	257	146
MAX	831	972	2780	755	281	2850	720	534	1040	410	1050	500
MIN	133	144	203	189	162	156	206	179	146	100	90	80

CAL YR 1977 TOTAL 100014 MEAN 274 MAX 2780 MIN 65
WTR YR 1978 TOTAL 112043 MEAN 307 MAX 2850 MIN 80

Note: No gage height-record, July 22 to Sept. 18.

03120500 McGUIRE CREEK BELOW LEESVILLE DAM, NEAR LEESVILLE, OH

LOCATION.--Lat 40°28'13", long 81°11'48", in E. 1/2 sec. 36, T.13 N., R.6 W., Carroll County, Hydrologic Unit 05040001, on left bank at outlet of Leesville Dam, 1.3 mi (2.1 km) upstream from mouth, and 1.4 mi (2.3 km) northeast of Leesville.

DRAINAGE AREA.--48.3 mi² (125 km²).

PERIOD OF RECORD.--October 1938 to current year. Published as McGuire Creek near Leesville 1938-39.

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder and V-notch weir. Datum of gage is 915.00 ft (278.892 m) National Geodetic Vertical Datum of 1929. Prior to May 27, 1942, nonrecording gage at site 100 ft (30 m) upstream at present datum.

REMARKS.--Records good. Flow regulated by Leesville Lake (see station 03120000). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--40 years, 52.3 ft³/s (1.481 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 740 ft³/s (21.0 m³/s) Mar. 4, 1940; maximum gage height, 7.88 ft (2.402 m) Mar. 4, 1940 (backwater from Conotton Creek); no flow several days during 1939-41.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 248 ft³/s (7.02 m³/s) Dec. 21, gage height, 4.45 ft (1.356 m); minimum daily, 1.3 ft³/s (0.037 m³/s) Mar. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	11	172	219	164	22	154	47	41	23	11	22
2	111	11	172	109	162	22	152	41	38	31	10	16
3	144	11	170	41	138	22	150	34	44	57	11	14
4	125	12	170	22	56	15	148	33	38	57	35	13
5	80	12	170	22	26	8.7	146	43	32	51	29	11
6	74	12	172	25	41	8.7	144	41	26	44	10	10
7	66	12	115	25	49	8.7	146	36	26	35	21	9.0
8	65	15	129	49	49	8.7	142	39	58	38	34	8.4
9	71	15	170	60	24	8.7	135	90	138	42	26	7.9
10	74	33	168	42	18	8.7	126	127	186	23	35	7.5
11	71	49	168	117	22	9.0	92	133	184	14	30	6.8
12	65	45	166	162	22	9.0	77	127	174	7.3	23	6.8
13	58	40	166	162	31	37	73	126	162	8.7	18	8.2
14	51	34	81	140	36	22	68	131	95	71	15	7.7
15	45	106	4.0	61	26	27	63	131	64	104	12	9.0
16	41	161	4.0	28	21	11	56	144	56	99	11	12
17	36	160	3.4	45	23	1.3	50	154	50	89	10	20
18	32	164	3.6	49	23	1.4	47	168	45	77	9.0	18
19	30	162	49	50	23	1.4	53	166	57	65	8.7	15
20	26	162	150	50	23	2.9	77	164	53	53	9.0	13
21	22	160	208	50	16	11	89	164	46	41	8.2	11
22	20	160	227	50	12	40	92	160	39	30	7.7	9.6
23	18	160	225	38	12	55	90	152	30	24	7.3	8.4
24	16	158	223	29	12	61	89	146	23	25	6.6	7.9
25	15	158	221	46	12	67	85	138	19	20	6.1	7.3
26	16	158	221	85	19	82	79	109	23	17	5.9	6.6
27	15	156	217	113	22	111	74	71	26	15	5.6	5.9
28	14	156	225	113	22	111	67	67	49	13	5.8	5.5
29	14	154	228	113	---	111	61	61	41	12	5.8	4.9
30	13	164	225	144	---	111	55	55	32	11	7.5	4.5
31	12	---	221	164	---	129	---	49	---	12	20	---
TOTAL	1498	2811	4844.0	2423	1104	1144.2	2880	3147	1895	1209.0	454.2	306.9
MEAN	48.3	93.7	156	78.2	39.4	36.9	96.0	102	63.2	39.0	14.7	10.2
MAX	144	164	228	219	164	129	154	168	186	104	35	22
MIN	12	11	3.4	22	12	1.3	47	33	19	7.3	5.6	4.5

CAL YR 1977 TOTAL 20808.1 MEAN 57.0 MAX 228 MIN 1.2
WTR YR 1978 TOTAL 23716.3 MEAN 65.0 MAX 228 MIN 1.3

03122500 TUSCARAWAS RIVER BELOW DOVER DAM, NEAR DOVER, OH

LOCATION.--Lat 40°31'47", long 81°25'48", in T.9 N., R.2 W., Tuscarawas County, Hydrologic Unit 05040001, on left bank at downstream side of bridge on State Highway 416, 2.2 mi (3.5 km) downstream from Dover Dam, 1.5 mi (2.4 km) east of Dover, and 3.4 mi (5.5 km) upstream from Sugar Creek.

DRAINAGE AREA.--1,405 mi² (3,639 km²).

PERIOD OF RECORD.--October 1923 to current year. Published as Tuscarawas River near Dover 1923-39.

REVISED RECORDS.--WSP 803: 1933(M). WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 861.51 ft (262.588 m) National Geodetic Vertical Datum of 1912. Prior to Aug. 30, 1930, nonrecording gage at same site and datum.

REMARKS.--Records good. Diversion from basin at Portage Lakes (See REMARKS for stations 03116000 and 03117000). Records include diversion from Sugar Creek well field. Mean passage for the 1978 water year, 16.0 ft³/s (0.46 m³/s) (see REMARKS for station 03124500). Flow regulated by four flood-control reservoirs since 1936 at points 2.2 mi (3.5 km) to 25 mi (40 km) upstream (see stations 03119500, 03120000, 03121000, and 03122000). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--55 years, 1,406 ft³/s (39.82 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,400 ft³/s (748 m³/s) Jan. 26, 1937, gage height, 15.51 ft (4.727 m); minimum daily, 6.5 ft³/s (0.18 m³/s) Oct. 26, 1948.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,140 ft³/s (174 m³/s) Dec. 15, gage height, 7.22 ft (2.201 m); minimum daily, 419 ft³/s (11.9 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1490	544	3840	1800	3500	850	5720	1360	2020	970	580	1240
2	3150	538	5010	1600	3160	850	5610	1270	1590	1060	538	914
3	2610	532	3790	1540	2800	850	5550	1200	1460	2360	531	706
4	2120	538	2910	1400	2330	850	5660	1140	1380	2440	636	629
5	1640	544	2970	1400	1910	850	5600	1360	1190	1810	601	587
6	1330	544	4790	1360	1810	826	5770	1530	1100	1350	954	559
7	1310	538	4980	1360	1600	834	5860	1350	1070	1140	1270	545
8	1290	750	4620	2020	1500	834	5660	1230	1920	1080	1490	531
9	2180	848	4820	3800	1400	850	5220	2130	4290	1080	1180	517
10	2740	890	4050	3790	1300	970	4790	3290	3600	922	2000	503
11	2030	1788	2800	3490	1300	1280	4920	2820	3250	842	3780	489
12	1570	1550	2410	3160	1200	1980	4350	2290	3150	770	2970	503
13	1380	1250	2360	2850	1200	3800	4170	2290	3500	706	1350	538
14	1240	1210	3710	2330	1100	3530	2630	3720	2140	1450	1080	608
15	1130	1180	4620	2100	1100	2400	1960	4150	1860	2080	914	1030
16	1050	1540	5700	1800	1100	5260	1760	4190	1640	1790	842	778
17	1060	3260	5780	1710	1000	5760	1650	4250	1470	1320	770	658
18	1050	4160	5670	1600	1000	5810	1620	4630	1390	1110	706	615
19	988	3180	5640	1500	1000	5700	1800	4740	2580	1000	650	601
20	932	2390	5620	1500	950	5650	3200	4010	3720	938	615	566
21	897	2250	5580	1500	950	5630	4100	3410	2290	890	587	538
22	855	2570	5670	1500	950	5580	3760	3070	1750	866	580	552
23	750	2210	5780	1400	900	5560	2980	2640	1320	922	552	496
24	687	1980	5540	1400	900	5500	2530	2700	1150	1520	545	475
25	666	1790	5380	1400	900	5250	2480	4000	1040	1270	531	447
26	652	1680	5530	2910	900	5320	2250	3250	1080	994	524	440
27	645	1560	5360	3520	850	5010	1920	2250	1290	882	510	447
28	624	1460	5380	3960	850	5670	1730	1790	3020	826	510	447
29	598	1410	4970	4230	---	5670	1580	1560	1720	866	566	426
30	562	1550	2640	3930	---	5630	1440	1450	1260	778	636	419
31	538	---	2380	3720	---	5740	---	1970	---	674	1070	---
TOTAL	39764	46226	140300	71580	39460	110294	108270	81040	60240	36706	30068	17804
MEAN	1283	1541	4526	2309	1409	3558	3609	2614	2008	1184	970	593
MAX	3150	4160	5780	4230	3500	5810	5860	4740	4290	2440	3780	1240
MIN	538	532	2360	1360	850	826	1440	1140	1040	674	510	419

CAL YR 1977 TOTAL 647074 MEAN 1773 MAX 6030 MIN 388
WTR YR 1978 TOTAL 781752 MEAN 2142 MAX 5860 MIN 419

03124000 SUGAR CREEK BELOW BEACH CITY DAM, NEAR BEACH CITY, OH

LOCATION.--Lat 40°38'08", long 81°33'11", in T10 N., R.3 W., Tuscarawas County, Hydrologic Unit 05040001, on right bank 1,000 ft (305 m) downstream from Beach City Dam, 0.4 mi (0.6 km) downstream from South Fork, and 1.8 mi (2.9 km) southeast of Beach City.

DRAINAGE AREA.--300 mi² (777 km²).

PERIOD OF RECORD.--October 1938 to current year. Published as Sugar Creek near Beach City prior to 1940.

REVISED RECORDS.--WSP 953: 1941.

GAGE.--Water-stage recorder. Datum of gage is 928.00 ft (282.854 m) National Geodetic Vertical Datum of 1912. Prior to Mar. 23, 1939, nonrecording gage at site 500 ft (152 m) downstream at datum 1 ft (0.3 m) higher. Mar. 23, 1939, to Sept. 26, 1949, water-stage recorder at site 300 ft (91 m) downstream at present datum.

REMARKS.--Records good. Flood flow regulated by Beach City Lake (see station 03123500). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--40 years, 268 ft³/s (7.590 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,520 ft³/s (213 m³/s) July 6, 1969, gage height, 11.26 ft (3.432 m), from floodmark in well; no flow Oct. 7-30, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,350 ft³/s (66.6 m³/s) Mar. 23, gage height, 6.93 ft (2.112 m); minimum daily, 31 ft³/s (0.88 m³/s) Sept. 11, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	201	71	1050	218	477	100	2170	205	354	138	43	237
2	1070	70	1560	212	388	100	1700	188	232	147	42	139
3	1300	70	1050	162	334	100	1650	172	187	383	47	91
4	704	70	664	160	301	100	1580	165	164	301	53	65
5	360	69	579	162	259	100	1030	224	146	205	54	52
6	283	71	1500	164	245	100	840	243	132	157	115	48
7	289	72	1780	171	228	100	1030	197	126	127	188	41
8	267	95	1600	465	206	100	980	178	322	133	119	39
9	628	172	752	1050	197	105	688	386	948	130	80	34
10	840	146	462	712	192	127	552	546	848	104	450	32
11	519	315	401	510	178	226	504	365	391	88	684	31
12	367	224	370	447	169	492	498	283	241	81	308	31
13	285	160	367	367	160	992	417	337	197	77	160	139
14	237	135	752	327	150	832	349	804	174	254	108	107
15	206	126	1340	292	140	318	301	1020	146	239	84	256
16	185	132	1670	254	143	852	272	860	126	130	72	222
17	172	419	1590	226	130	1160	250	736	118	92	64	220
18	157	760	1720	210	130	1160	239	1060	113	75	59	197
19	144	453	1710	200	130	1150	404	1440	564	66	53	119
20	133	306	1700	200	120	1030	648	1140	684	61	52	86
21	123	306	1700	190	120	567	852	684	330	57	52	69
22	112	576	1750	190	120	992	712	522	212	55	44	62
23	104	433	1610	192	110	2050	510	419	159	58	40	56
24	98	344	628	185	110	2200	465	468	130	138	37	49
25	93	287	582	210	110	2160	425	644	113	120	37	44
26	91	265	546	486	110	1990	370	492	108	78	37	41
27	88	228	354	992	100	1420	320	342	162	63	36	38
28	86	199	283	1230	100	2050	276	276	540	59	35	36
29	83	179	263	1150	---	2250	248	237	327	53	58	34
30	78	216	241	876	---	2250	226	210	197	49	75	34
31	74	---	228	604	---	2240	---	318	---	47	165	---
TOTAL	9377	6969	30802	12814	5157	29413	20516	15161	8491	3765	3451	2649
MEAN	302	232	994	413	184	949	684	489	283	121	111	88.3
MAX	1300	760	1780	1230	477	2250	2170	1440	948	383	684	256
MIN	74	69	228	160	100	100	226	165	108	47	35	31

CAL YR 1977 TOTAL 118166 MEAN 324 MAX 1780 MIN 34
WTR YR 1978 TOTAL 148565 MEAN 407 MAX 2250 MIN 31

03124500 SUGAR CREEK AT STRASBURG, OH

LOCATION.--Lat 40°35'15", long 81°31'24", in NW 1/4 sec. 1, T.9 N., R.3 W., Tuscarawas County, Hydrologic Unit 05040001, on left bank 150 ft (46 m) upstream from bridge on State Highway 21, 0.8 mi (1.3 km) upstream from Broad Run, and 0.1 mi (0.2 km) southeast of Strasburg.

DRAINAGE AREA.--311 mi² (805 km²).

PERIOD OF RECORD.--August 1931 to March 1933, January 1935 to July 1939, October 1961 to current year.

REVISED RECORDS.--WSP 1305: 1932-33(M). WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 896.24 ft (273.174 m) National Geodetic Vertical Datum of 1912. July 29, 1931, to Mar. 31, 1933, and Dec. 10, 1934, to July 31, 1939, nonrecording gage, and Oct. 1, 1961, to May 26, 1964, water-stage recorder at datum 2.00 ft (0.610 m) higher.

REMARKS.--Records good except those for periods of no gage height record, which are fair. Flood flow regulated by Beach City Lake 5.0 mi (8.0 km) upstream, since August 1937 (see station 03123500). Part of municipal water supply for city of Canton, starting May 1962, is pumped from well field 4.3 mi (6.9 km) upstream; pumpage is returned to Nimishillen Creek. Mean pumpage for water year 1978, 16.0 ft³/s (0.45 m³/s). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--21 years (1931-32, 1935-38, 1961-78), 296 ft³/s (8.383 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,700 ft³/s (558 m³/s) Aug. 7, 1935, gage height, 14.70 ft (4.48 m) (present datum), from rating curve extended above 8,400 ft³/s (238 m³/s); no flow all or part of each day Sept. 29 to Nov. 6, 1963, Sept. 20, Dec. 3, 4, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,410 ft³/s (68.3 m³/s) Mar. 26, gage height, 5.92 ft (1.804 m); minimum daily, 46 ft³/s (1.30 m³/s) Aug. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	214	80	1050	230	500	110	2230	238	400	157	60	223
2	1140	77	1750	220	400	100	1810	223	300	159	57	145
3	1430	76	1140	170	350	100	1780	213	220	353	58	105
4	750	76	671	170	300	100	1720	202	190	302	63	81
5	354	76	618	170	280	100	1200	243	170	213	62	69
6	265	76	1630	170	260	100	1000	280	160	169	103	65
7	270	76	1690	190	240	100	1160	238	150	143	167	60
8	246	90	1220	400	220	110	1140	216	300	138	116	58
9	572	165	750	1100	210	170	799	404	1100	139	87	55
10	845	142	500	800	200	199	704	604	950	121	378	52
11	517	283	430	550	190	311	647	418	500	102	651	52
12	348	225	390	470	180	669	625	331	300	97	291	51
13	270	167	420	410	170	1130	547	375	240	95	153	127
14	229	142	700	330	160	1230	449	833	210	243	108	120
15	203	134	1400	300	160	539	391	1090	180	243	88	211
16	183	134	1700	280	150	1040	349	926	150	143	77	220
17	173	367	1600	240	150	1270	322	804	140	110	70	186
18	159	745	1700	230	150	1300	305	1090	130	94	68	195
19	145	443	1700	230	150	1340	449	1500	650	84	63	127
20	136	293	1700	220	150	1010	700	1230	750	80	62	100
21	125	280	1700	210	140	809	889	741	450	75	59	84
22	116	556	1700	220	130	1120	775	579	250	73	54	77
23	110	429	1600	200	120	2040	543	467	200	75	50	72
24	104	330	650	200	120	2170	508	493	160	121	49	66
25	98	278	600	220	120	2170	471	669	140	127	48	63
26	97	258	550	500	110	2170	408	547	120	91	48	60
27	94	230	380	1000	110	2200	356	400	182	78	47	58
28	93	201	320	1250	110	2200	311	310	551	73	46	56
29	90	186	280	1200	---	2270	282	270	346	69	56	55
30	86	207	260	900	---	2300	261	250	213	65	68	52
31	82	---	240	700	---	2270	---	360	---	63	130	---
TOTAL	9544	6822	31039	13480	5530	32747	23131	16544	9802	4095	3437	2945
MEAN	308	227	1001	435	198	1056	771	534	327	132	111	98.2
MAX	1430	745	1750	1250	500	2300	2230	1500	1100	353	651	223
MIN	82	76	240	170	110	100	261	202	120	63	46	51

CAL YR 1977 TOTAL 121515 MEAN 333 MAX 1750 MIN 34
WTR YR 1978 TOTAL 159116 MEAN 436 MAX 2300 MIN 46

Note: No gage height record Dec. 9 to Mar. 9, May 27 to June 27.

MUSKINGUM RIVER BASIN

03125000 HONE CREEK NEAR NEW PHILADELPHIA, OH

LOCATION.--Lat 40°28'06", long 81°24'10", Tuscarawas County, Hydrologic Unit 05040001, on right bank 100 ft (30 m) downstream from highway bridge, 0.5 mi (0.8 km) upstream from the mouth, and 1.5 mi (2.4 km) southeast of New Philadelphia.

DRAINAGE AREA.--1.64 mi² (4.25 km²).

PERIOD OF RECORD.--December 1936 to current year.

REVISED RECORDS.--WSP 1173: 1961(M). WSP 1385: 1951-53(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 872.49 ft (265.935 m) National Geodetic Vertical Datum of 1912.

REMARKS.--Records good except those for winter periods, which are fair. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--41 years, 1.27 ft³/s (0.036 m³/s) 10.52 in/yr (267 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 378 ft³/s (10.7 m³/s) July 7, 1969, gage height, 5.77 ft (1.759 m); no flow at times in 1938-40, 1942-68, 1970-75.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft³/s (1.42 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 1	1045	*109	3.09	*3.29	1.003	Aug. 7	1215	72	2.04	2.79	0.850
Dec. 14	0845	85	2.41	2.97	0.905	Sept. 16	2100	98	2.78	3.15	0.960

Minimum discharge, 0.04 ft³/s (0.001 m³/s) Sept. 11, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	.25	4.9	.70	.90	.36	1.2	.61	.53	.24	.08	.34
2	2.5	.25	2.3	.48	.79	.36	.96	.55	1.3	3.5	.06	.18
3	1.4	.24	2.4	.36	.72	.36	1.6	.50	1.1	1.4	.18	.14
4	.86	.40	2.0	.28	.63	.36	1.9	1.1	.57	.63	.08	.11
5	.62	1.0	24	.30	.59	.36	1.9	1.6	.48	.46	.23	.09
6	1.7	1.3	6.4	.42	.56	.36	2.0	1.8	.40	.36	.80	.08
7	1.7	.48	2.6	1.0	.53	.36	2.3	1.3	2.4	.29	13	.07
8	4.6	.76	1.8	5.8	.50	.40	1.6	2.6	3.7	.72	2.1	.06
9	4.4	.35	1.6	3.1	.48	.46	1.3	3.1	1.6	.35	1.4	.05
10	2.0	3.3	1.1	1.9	.46	1.1	1.2	1.8	.83	.28	4.5	.05
11	1.2	1.1	.84	1.3	.46	2.2	1.2	1.7	.59	.21	.96	.05
12	.88	.65	.80	.91	.46	4.3	1.1	1.8	.84	.17	.56	.50
13	.68	.60	3.1	.80	.44	6.2	.96	4.0	.64	.18	.40	.24
14	.61	.51	27	.70	.44	21	.77	4.3	.47	2.6	.29	3.6
15	.53	.52	5.8	.60	.42	25	.68	3.9	.37	.46	.26	2.3
16	.63	2.9	3.1	.55	.42	8.0	.68	2.9	.35	.29	.23	11
17	.50	5.9	2.3	.55	.40	5.0	.60	10	.32	.21	.18	4.3
18	.46	2.3	2.0	.55	.40	3.2	.70	7.5	.76	.17	.14	2.7
19	.46	1.4	1.6	.56	.40	2.6	1.2	3.6	1.1	.12	.23	1.3
20	.46	1.1	2.5	.60	.38	2.2	3.2	2.6	.38	.11	.18	.80
21	.36	2.9	1.6	.61	.38	3.0	2.9	2.1	.35	.10	.10	.65
22	.31	1.7	1.2	.53	.38	1.8	2.2	1.6	.27	.09	.08	.53
23	.28	1.5	1.2	.46	.38	1.3	1.6	1.8	.23	.84	.08	.44
24	.47	1.2	1.3	.52	.36	1.2	1.3	2.2	.21	.34	.08	.44
25	.67	1.1	2.0	1.6	.36	3.0	1.2	1.3	.20	.21	.08	.35
26	.28	.92	.80	7.5	.36	4.6	1.0	.97	.81	.15	.06	.28
27	.25	.70	.64	6.2	.36	6.3	.87	.78	.85	.12	.17	.29
28	.23	.73	.44	3.5	.36	2.4	.76	.67	.56	.09	.24	.21
29	.21	.59	.44	2.1	---	1.6	.73	.67	.28	.08	.34	.12
30	.20	5.0	.47	1.4	---	1.2	.66	.70	.26	.08	1.1	2.2
31	.22	---	.49	1.1	---	1.1	---	.59	---	.14	2.7	---
TOTAL	46.67	41.65	108.72	47.00	13.32	111.68	40.27	70.64	22.75	14.99	30.89	33.47
MEAN	1.51	1.39	3.51	1.52	.48	3.60	1.34	2.28	.76	.48	1.00	1.12
MAX	17	5.9	27	7.5	.90	25	3.2	10	3.7	3.5	13	11
MIN	.20	.24	.44	.28	.36	.36	.60	.50	.20	.08	.06	.05
CFSM	.92	.85	2.14	.93	.29	2.20	.82	1.39	.46	.29	.61	.68
IN.	1.06	.94	2.46	1.07	.30	2.53	.91	1.60	.52	.34	.70	.76

CAL YR 1977 TOTAL 496.10 MEAN 1.36 MAX 27 MIN .02 CFSM .83 IN 11.25
WTR YR 1978 TOTAL 582.05 MEAN 1.59 MAX 27 MIN .05 CFSM .97 IN 13.19

03126000 STILLWATER CREEK AT PIEDMONT, OH

LOCATION.--Lat 40°11'41", long 81°12'56", in sec. 35, T.10 N., R.6 W., Harrison County, Hydrologic Unit 05040001, on left bank 400 ft (122 m) downstream from outlet of Piedmont Dam and Boggs Fork, and 0.7 mi (1.1 km) northwest of Piedmont.

DRAINAGE AREA.--122 mi² (316 km²).

PERIOD OF RECORD.--October 1938 to current year. Prior to February 1939 monthly discharge only, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 872.00 ft (265.785 m) National Geodetic Vertical Datum of 1912. Prior to Sept. 9, 1949, at site 1,000 ft (305 m) downstream at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good. Flow regulated by Piedmont Lake (see station 03125500). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--40 years, 133 ft³/s (3.767 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,470 ft³/s (41.6 m³/s) Dec. 4, 1950; maximum gage height, 11.40 ft (3.487 m) Mar. 5, 1963; minimum daily discharge, 0.2 ft³/s (0.006 m³/s) Sept. 3, 4, 10, 1953.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 975 ft³/s (27.6 m³/s) June 8; maximum gage height, 11.05 ft (3.368 m) June 8 (backwater from unnamed tributary); minimum daily, 24 ft³/s (0.68 m³/s) Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	25	243	35	418	48	374	134	143	356	68	99
2	77	26	225	35	428	48	362	116	142	356	62	79
3	62	28	220	41	419	48	366	113	160	390	64	72
4	55	26	221	54	410	48	382	114	146	414	71	70
5	51	34	310	89	273	48	383	132	133	393	65	65
6	51	32	240	109	93	48	425	129	123	329	73	60
7	52	33	253	117	62	48	483	124	126	167	123	60
8	58	35	265	210	87	48	429	128	840	123	128	59
9	66	33	284	257	87	48	386	214	866	130	91	60
10	64	49	274	265	105	55	359	193	557	120	91	58
11	59	60	267	330	113	72	344	162	290	116	100	53
12	55	53	261	366	113	139	328	150	329	109	92	54
13	52	48	284	377	101	229	244	182	394	104	87	75
14	49	46	327	372	95	638	126	223	428	126	77	67
15	47	118	171	262	94	719	121	247	435	150	71	62
16	48	174	138	57	70	317	118	289	422	134	67	59
17	49	193	216	40	60	203	114	335	402	110	62	59
18	48	222	357	42	55	199	122	484	387	99	59	56
19	47	226	479	70	55	262	143	411	440	89	56	49
20	46	221	480	124	50	300	176	290	393	83	65	41
21	44	220	262	145	50	323	191	240	401	79	60	41
22	42	219	99	142	50	345	175	328	410	79	51	38
23	43	217	95	140	50	320	160	398	402	76	42	33
24	39	215	95	140	50	304	182	414	378	97	39	31
25	38	212	97	171	50	356	211	405	358	87	38	30
26	38	210	87	324	50	415	210	386	353	79	36	29
27	37	208	86	230	50	425	198	372	320	75	37	29
28	36	208	83	188	50	312	189	362	323	70	42	25
29	32	207	49	187	---	289	182	350	212	67	56	24
30	29	217	32	266	---	335	175	260	281	63	63	24
31	31	---	32	370	---	340	---	151	---	68	119	---
TOTAL	1508	3815	6532	5555	3588	7329	7658	7836	10594	4738	2155	1561
MEAN	48.6	127	211	179	128	236	255	253	353	153	69.5	52.0
MAX	77	226	480	377	428	719	483	484	866	414	128	99
MIN	29	25	32	35	50	48	114	113	123	63	36	24

CAL YR 1977 TOTAL 33611.8 MEAN 92.1 MAX 698 MIN 9.0
WTR YR 1978 TOTAL 62869.0 MEAN 172 MAX 866 MIN 24

03127000 STILLWATER CREEK AT TIPPECANOE, OH

LOCATION.--Lat 40°16'13", long 81°17'26", in NW 1/4 sec. 22, T.12 N., R.7 W., Harrison County, Hydrologic Unit 05040001, on left bank at downstream side of highway bridge at Tippecanoe, 0.4 mi (0.6 km) downstream from Brushy Fork, 3.6 mi (5.8 km) upstream from Weaver Run, 6 mi (10 km) upstream from Laurel Creek, and 9 mi (14 km) south of Dennison.

DRAINAGE AREA.--282 mi² (730 km²).

PERIOD OF RECORD.--October 1938 to current year. Prior to January 1939 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 849.00 ft (258.775 m) National Geodetic Vertical Datum of 1912. Prior to Feb. 9, 1939, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated by Clendening Lake on Brushy Fork, 1.9 mi (3.1 km) upstream, and Piedmont Lake, 16 mi (26 km) upstream (see stations 03126500 and 03125500). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--40 years, 308 ft³/s (8.723 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,410 ft³/s (125 m³/s) Mar. 7, 1945, Mar. 5, 1963; maximum gage height, 17.29 ft (5.270 m) Mar. 5, 1963; minimum daily discharge, 1.1 ft³/s (0.031 m³/s) Oct. 4, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,730 ft³/s (77.3 m³/s) June 9, gage height, 15.33 ft (4.673 m); minimum daily, 34 ft³/s (0.96 m³/s) Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	172	47	367	96	836	109	727	266	212	580	106	205
2	261	37	425	104	860	105	692	213	196	499	99	141
3	225	39	359	76	775	106	678	198	247	601	94	117
4	195	40	388	65	592	106	698	189	233	684	114	109
5	179	40	614	87	446	103	854	233	197	582	109	95
6	175	44	1150	110	209	84	883	239	176	511	109	84
7	180	44	846	140	113	71	1130	217	169	338	189	80
8	189	46	599	335	159	71	1080	213	1180	231	298	75
9	222	46	570	779	157	72	865	433	2430	249	182	72
10	238	50	572	742	158	78	726	548	2610	226	238	70
11	215	90	546	770	173	96	666	392	1870	204	274	63
12	206	85	564	775	171	218	630	314	859	179	243	66
13	220	71	683	761	167	560	564	334	847	162	219	112
14	213	72	992	730	136	1300	375	550	937	198	194	104
15	208	98	1160	550	153	2310	324	588	980	275	144	95
16	208	206	760	186	126	2200	301	582	874	259	117	88
17	210	252	572	115	90	1370	259	630	575	222	105	87
18	210	311	677	131	80	738	225	1210	504	199	92	83
19	209	322	924	133	75	580	285	1390	514	180	82	78
20	206	304	948	173	75	684	369	1070	614	162	83	70
21	193	319	898	219	75	756	541	652	647	150	84	62
22	169	365	366	216	75	904	559	599	515	146	75	58
23	169	359	181	212	70	820	462	825	482	137	63	52
24	166	321	149	207	70	666	459	884	438	143	55	44
25	165	268	153	257	70	692	514	924	406	142	50	41
26	166	248	136	704	78	1010	483	830	402	128	44	39
27	169	243	142	950	96	1420	366	520	553	118	44	39
28	133	240	137	797	108	1440	333	468	924	111	53	37
29	63	239	131	659	---	992	309	439	1080	102	60	34
30	59	250	95	647	---	809	292	464	841	97	70	34
31	58	---	95	776	---	718	---	287	---	100	197	---
TOTAL	5651	5096	16199	12504	6213	21188	16649	16701	22512	7915	3886	2334
MEAN	182	170	523	403	222	683	555	539	750	255	125	77.8
MAX	261	365	1160	950	860	2310	1130	1390	2610	684	298	205
MIN	58	37	95	65	70	71	225	189	169	97	44	34

CAL YR 1977 TOTAL 83310 MEAN 228 MAX 2420 MIN 21
WTR YR 1978 TOTAL 136848 MEAN 375 MAX 2610 MIN 34

03127500 STILLWATER CREEK AT UHRICHSVILLE, OH

LOCATION.--Lat 40°23'10", long 81°20'50", Tuscarawas County, Hydrologic Unit 05040001, on left bank at concrete dam of Dennison Water Supply Co. at Uhrichsville, 2.2 mi (3.5 km) upstream from Little Stillwater Creek.

DRAINAGE AREA.--367 mi² (951 km²).

PERIOD OF RECORD.--July 1922 to current year.

REVISED RECORDS.--WSP 853: Drainage area. WSP 1113: 1923-24, 1926-31, 1932(M), 1933-35.

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 839.37 ft (255.840 m) National Geodetic Vertical Datum of 1912. Prior to Oct. 1, 1936, nonrecording gage at site 1.7 mi (2.7 km) upstream at same datum. Auxiliary water-stage recorder below concrete dam at datum 10.00 ft (3.048 m) lower.

REMARKS.--Records fair. Flow regulated by Piedmont Lake, 35 mi (56 km) upstream, and Clendening Lake on Brushy Fork, 22 mi (35 km) upstream, beginning in 1938 (see stations 03125500 and 03126500). Water is diverted from Dennison water-supply dam 1.7 mi (2.7 km) upstream from station for municipal supply of cities of Dennison and Uhrichsville; diversion not included in figures of daily discharge. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--56 years, 424 ft³/s (12.01 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,650 ft³/s (217 m³/s) Aug. 8, 9, 1935, gage height, 14.2 ft (4.33 m) at former site, 12.8 ft (3.90 m) at present site; no flow at times in 1930, 1932, 1936, 1939-40, 1953, 1973.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of about 17.5 ft (5.33 m) at former site, and about 15.5 ft (4.72 m) at present site.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,030 ft³/s (85.8 m³/s) Mar. 16; maximum gage height, 5.05 ft (1.539 m) Mar. 16 (backwater from Tuscarawas River); minimum daily discharge, 40 ft³/s (1.13 m³/s) Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	178	56	558	133	910	124	959	469	369	742	116	509
2	369	50	684	133	949	124	910	407	324	565	103	282
3	362	44	581	120	920	120	871	369	430	635	95	205
4	288	44	550	83	733	124	890	288	400	1020	103	180
5	244	46	862	103	628	120	969	303	331	824	116	150
6	227	46	1600	116	377	116	1090	354	288	635	116	130
7	233	50	1200	163	183	87	1430	310	268	517	346	120
8	244	50	900	354	199	79	1590	310	920	346	725	110
9	317	55	824	1030	210	79	1290	717	2140	288	377	95
10	369	59	768	890	205	87	1050	920	2670	288	476	90
11	331	95	725	824	210	120	920	768	2680	250	604	85
12	282	120	684	929	227	295	852	596	1500	238	453	80
13	275	99	759	939	216	787	796	565	1100	221	369	189
14	274	79	1400	929	205	2040	684	852	1010	268	310	194
15	263	79	1600	814	194	2750	558	910	1040	354	256	157
16	245	153	1100	517	183	2970	509	796	1040	346	183	143
17	245	317	850	221	133	2650	476	824	796	288	168	124
18	245	453	862	173	111	1900	422	1450	628	244	138	116
19	245	461	999	189	99	979	469	1770	596	216	116	103
20	245	437	1150	189	91	843	558	1400	643	194	116	91
21	239	422	1190	250	90	890	733	950	676	178	103	75
22	282	492	929	288	85	1040	833	824	643	173	95	70
23	194	500	445	256	83	1100	750	910	558	157	75	60
24	194	476	275	250	85	900	700	1040	525	148	59	55
25	188	407	250	324	85	814	725	1090	484	153	56	50
26	182	346	238	843	85	1210	733	1060	48	143	48	46
27	177	331	157	1260	91	1800	643	843	50	124	50	44
28	177	317	183	1150	116	2000	565	659	60	116	60	42
29	126	310	194	920	---	1400	533	612	65	107	65	40
30	68	339	168	768	---	1100	492	581	75	99	75	40
31	62	---	133	843	---	1000	---	542	---	103	415	---
TOTAL	7310	6733	22818	16001	7703	29653	24000	23489	22357	9980	6387	3675
MEAN	236	224	736	516	275	957	800	758	745	322	206	123
MAX	369	500	1600	1260	949	2970	1590	1770	2680	1020	725	509
MIN	62	44	133	83	83	79	422	288	48	99	48	40
+	1.85	1.82	1.90	1.89	2.08	1.98	1.99	1.96	1.93	1.86	1.92	1.95

CAL YR 1977 TOTAL 118643 MEAN 325 MAX 2900 MIN 12 (+) 1.99
WTR YR 1978 TOTAL 180106 MEAN 493 MAX 2970 MIN 40 (+) 1.92

+ Diversion, in cubic feet per second, for minicipal supply of cities of Dennison and Uhrichsville, furnished by Dennison Water Supply Company.

03128500 LITTLE STILLWATER CREEK BELOW TAPPAN DAM, AT TAPPAN, OH

LOCATION.--Lat 40°21'25", long 81°13'49", in NW 1/4 sec. 4, T.13 N., R.7 W., Harrison County, Hydrologic Unit 05040001, on right bank 150 ft (46 m) downstream from outlet of lake at Tappan Dam, 1 mi (2 km) west of Tappan, and 2 mi (3 km) upstream from Plum Run.

DRAINAGE AREA.--71.1 mi² (184 km²).

PERIOD OF RECORD.--October 1938 to current year. Published as Little Stillwater Creek at Tappan 1938-39.

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder and masonry control. Datum of gage is 861.00 ft (262.433 m) National Geodetic Vertical Datum of 1912. Prior to Jan. 30, 1939, water-stage recorder at gate house of Tappan Dam at datum 9 ft (3 m) higher. Jan. 30 to Mar. 24, 1939, nonrecording gage and Mar. 25, 1939, to Aug. 6, 1944, water-stage recorder, at site 150 ft (46 m) downstream at present datum.

REMARKS.--Records good except those below 3.0 ft³/s (0.085 m³/s), which are fair. Flow completely regulated by Tappan Lake (see station 03128000). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--40 years, 75.0 ft³/s (2.124 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,050 ft³/s (29.7 m³/s) Mar. 13, 1939, gage height, 10.00 ft (3.048 m); no flow Sept. 12-15, 18, 19, 21-29, Oct. 13-21, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 550 ft³/s (15.6 m³/s) Dec. 21, gage height, 6.50 ft (1.981 m); minimum daily, 1.0 ft³/s (0.028 m³/s) Mar. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	240	141	4.3	370	253	131	14	51	51	15	70
2	21	243	206	4.5	415	355	131	15	52	51	14	70
3	25	243	206	4.7	360	5.2	131	18	55	61	16	65
4	26	243	206	4.7	272	1.4	216	23	53	65	18	61
5	27	240	206	4.5	272	1.3	405	35	48	64	18	53
6	31	240	209	4.3	112	1.2	526	40	45	61	21	46
7	32	240	209	4.3	3.5	1.2	465	41	46	56	51	39
8	42	237	209	3.2	1.2	1.1	360	46	86	53	77	29
9	50	119	267	2.6	2.2	1.0	350	62	112	51	72	24
10	56	28	303	53	2.5	1.2	204	67	112	46	157	21
11	56	3.5	299	320	2.7	1.3	11	69	112	39	151	19
12	53	3.5	299	508	2.9	1.4	18	69	112	31	84	20
13	50	3.4	296	415	3.1	1.5	26	75	151	26	80	38
14	117	3.4	146	168	3.3	1.5	37	84	264	58	157	34
15	139	3.4	3.1	61	3.3	1.5	41	88	410	84	121	31
16	137	36	43	61	3.3	1.5	45	91	405	86	52	26
17	206	92	144	61	3.3	1.5	46	99	292	151	46	27
18	274	112	227	61	3.3	1.5	52	112	239	253	39	25
19	285	109	369	61	3.3	1.5	61	112	84	232	32	23
20	285	109	427	61	3.3	1.5	79	112	21	69	31	22
21	281	172	502	61	3.1	1.5	89	112	23	13	24	19
22	281	209	544	61	2.9	1.6	95	213	23	13	21	16
23	281	117	532	61	2.6	2.5	97	425	21	14	18	14
24	281	29	526	61	2.4	7.8	99	502	20	16	17	13
25	281	7.3	213	61	2.2	7.8	101	514	18	16	16	13
26	278	2.6	28	61	2.1	9.8	235	272	30	15	14	12
27	257	2.6	2.8	59	2.0	48	385	52	48	14	14	12
28	243	2.6	3.3	59	86	89	288	51	61	12	15	9.8
29	243	2.6	3.7	59	---	101	124	51	61	10	16	9.3
30	243	37	3.9	116	---	106	13	51	56	9.3	20	9.3
31	243	---	4.2	264	---	119	---	52	---	14	52	---
TOTAL	4838	3129.9	6778.0	2790.1	1945.5	1130.3	4861	3567	3111	1734.3	1489	870.4
MEAN	156	104	219	90.0	69.5	36.5	162	115	104	55.9	48.0	29.0
MAX	285	243	544	508	415	355	526	514	410	253	157	70
MIN	14	2.6	2.8	2.6	1.2	1.0	11	14	18	9.3	14	9.3

CAL YR 1977 TOTAL 28932.3 MEAN 79.3 MAX 544 MIN 2.2
WTR YR 1978 TOTAL 36244.5 MEAN 99.3 MAX 544 MIN 1.0

03129000 TUSCARAWAS RIVER AT NEWCOMERSTOWN, OH

LOCATION.--Lat 40°15'41", long 81°36'33", in T.5 N., R.3 W., Tuscarawas County, Hydrologic Unit 05040001, on right bank 150 ft (46 m) upstream from highway bridge, 0.2 mi (0.3 km) south of Newcomerstown, 2 mi (3 km) upstream from Buckhorn Creek, and 4 mi (6 km) downstream from Dunlap Creek.

DRAINAGE AREA.--2,443 mi² (6,327 km²).

PERIOD OF RECORD.--September 1921 to current year.

REVISED RECORDS.--WSP 728: 1929(M). WSP 873: 1935. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 780.00 ft (237.744 m) National Geodetic Vertical Datum of 1912. Prior to Sept. 28, 1925, and July 18, 1935, to Feb. 13, 1939, nonrecording gage, Sept. 28, 1925, to July 17, 1935, water-stage recorder at site 1.5 mi (2.4 km) upstream at datum 5.03 ft (1.533 m) higher prior to Oct. 1, 1934, and 0.03 ft (0.009 m) higher Oct. 1, 1934, to Feb. 13, 1939.

REMARKS.--Records good except those for winter periods, which are fair, and March 14 to April 11, which are poor. Diversion from basin at Portage 03117000). Flow regulated by eight flood-control reservoirs at points 40 mi (64 km) to 64 mi (103 km) upstream. Water-quality data collected at this site 1946 to 1949, 1955 to 1977.

AVERAGE DISCHARGE.--57 years, 2,473 ft³/s (70.04 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,800 ft³/s (1,330 m³/s) Jan. 26, 1937, gage height, 20.65 ft (6.294 m), site and datum then in use; minimum daily, 170 ft³/s (4.81 m³/s) Aug. 6, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of about 21.5 ft (6.55 m), at site and datum used prior to Oct. 1, 1934, discharge, 83,000 ft³/s (2,350 m³/s) computed by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12,500 ft³/s (354 m³/s) Mar. 15, gage height, 9.18 ft (2.798 m) minimum daily, 590 ft³/s (16.7 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1680	1160	3850	2470	5680	1200	10000	2230	3100	2470	910	2280
2	4940	1150	6770	2390	5420	1200	9720	2100	2610	2100	890	1940
3	4940	1130	6770	2220	5080	1200	9180	1950	2620	3130	842	1420
4	4200	1110	4910	1870	4450	1200	9280	1880	2330	3970	900	1160
5	3090	1100	4870	1860	3640	1200	9370	2060	2040	3530	939	1040
6	2420	1110	9090	1860	2700	1200	9090	2350	1820	2680	1020	939
7	2290	1110	9500	1870	2300	1210	9780	2230	1750	2240	1830	861
8	2210	1140	8380	2430	2000	1140	10000	2080	3420	1940	2790	814
9	2670	1370	7520	5320	1900	1140	9350	3390	6410	1890	2440	776
10	4150	1420	6370	6130	1800	1200	8120	4940	7530	1720	2120	730
11	3890	1700	4880	5200	1800	1400	7520	4600	6820	1550	4500	703
12	2900	2280	3950	5100	1700	2040	6110	3620	5850	1410	4730	694
13	2450	1860	3860	4930	1600	4750	5810	3390	5420	1290	2790	842
14	2230	1660	6790	4440	1600	9280	4810	4810	4220	1520	2010	998
15	2120	1620	10700	3720	1500	9780	3360	6510	3530	2670	1720	1340
16	2020	1730	10400	3390	1500	8240	2930	6340	3350	2570	1470	1580
17	1930	3080	9760	2540	1500	10400	2700	6410	3060	2070	1270	1850
18	1980	5110	9150	2300	1400	10500	2540	8150	2660	1780	1160	1250
19	1990	4960	9040	2200	1400	9390	2760	8950	3100	1660	1060	1110
20	1920	3610	9310	2100	1300	8470	3720	8330	4780	1520	1010	978
21	1860	3040	9440	2000	1300	8280	5490	6590	4050	1240	949	890
22	1790	3580	9330	2000	1300	8010	5900	5220	3010	1140	900	814
23	1670	3690	9000	2000	1300	8470	4910	4670	2430	1120	852	786
24	1570	3020	8290	2020	1200	9110	4060	4750	2080	1430	804	712
25	1520	2630	7110	2230	1200	9200	3860	5770	1880	1760	758	676
26	1480	2320	6640	3680	1200	9690	3680	6030	1890	1420	730	631
27	1470	2130	6280	6290	1200	11500	3480	4350	2170	1180	712	613
28	1420	1950	5980	6370	1200	11000	3160	3240	3850	1060	703	605
29	1370	1800	5840	6770	---	11200	2770	2810	4030	1020	739	600
30	1250	1800	4750	6540	---	10700	2470	2580	3060	998	871	590
31	1190	---	2710	5870	---	10200	---	2660	---	958	1350	---
TOTAL	72610	65370	221240	110110	60170	193500	175930	134990	104870	57036	45769	30222
MEAN	2342	2179	7137	3552	2149	6242	5864	4355	3496	1840	1476	1007
MAX	4940	5110	10700	6770	5680	11500	10000	8950	7530	3970	4730	2280
MIN	1190	1100	2710	1860	1200	1140	2470	1880	1750	958	703	590

CAL YR 1977 TOTAL 1055587 MEAN 2892 MAX 11200 MIN 640
WTR YR 1978 TOTAL 1271817 MEAN 3484 MAX 11500 MIN 590

03130000 BLACK FORK BELOW CHARLES MILL DAM, NEAR MIFFLIN, OH

LOCATION.--Lat 40°44'16", long 82°21'48", in NE 1/4 sec. 35, T.23 N., R.17 W., Ashland County, Hydrologic Unit 05040002, on left bank 700 ft (213 m) downstream from Charles Mill Dam, 2.5 mi (4.0 km) south of Mifflin, and 4 mi (6 km) upstream from Rocky Fork.

DRAINAGE AREA.--217 mi² (562 km²).

PERIOD OF RECORD.--October 1938 to current year. Prior to October 1940, published as Black Fork near Mifflin. Monthly discharge only for October 1938, published in WSP 1305.

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 981.56 ft (299.179 m) National Geodetic Vertical Datum of 1912. Dec. 3, 1941, to Dec. 5, 1944, water-stage recorder at site 300 ft (91 m) downstream at same datum.

REMARKS.--Records good. Flow regulated by Charles Mill Lake (see station 03129500). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--40 years, 196 ft³/s (5.551 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,800 ft³/s (79.3 m³/s) Mar. 13, 1964 from rating curve extended above 1,900 ft³/s (53.8 m³/s); maximum gage height, 8.45 ft (2.576 m) Mar. 14, 1939; minimum daily discharge, 0.9 ft³/s (0.025 m³/s) Apr. 21, 1940.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a discharge of 11,700 ft³/s (331 m³/s), computed by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,490 ft³/s (42.2 m³/s) Dec. 20, gage height, 6.02 ft (1.835 m); minimum daily, 9.0 ft³/s (0.25 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	34	161	592	391	125	1300	240	217	56	22	16
2	50	34	207	423	394	121	1270	212	150	58	21	15
3	48	35	282	323	359	119	1200	172	134	64	30	15
4	46	37	349	260	329	115	1020	123	119	69	33	16
5	43	38	383	220	278	111	1290	113	84	69	30	14
6	46	39	371	200	263	105	1100	117	64	67	30	13
7	43	42	333	187	232	101	1110	117	67	64	31	13
8	49	44	299	200	212	97	1290	117	70	59	31	13
9	59	46	290	237	197	93	1250	165	72	55	37	11
10	64	54	271	275	185	93	1270	215	69	53	59	11
11	73	59	242	305	180	93	1250	208	65	48	53	11
12	74	64	221	323	177	99	1020	195	67	39	48	13
13	70	62	205	326	175	113	835	210	67	37	41	16
14	65	58	162	302	172	97	633	266	64	37	37	15
15	61	57	38	266	170	31	448	345	62	33	32	16
16	62	60	30	235	167	24	345	412	61	33	30	16
17	55	80	317	215	162	177	302	405	59	30	28	18
18	51	153	785	200	162	803	269	415	59	26	22	17
19	52	240	1110	187	160	1100	342	391	60	26	22	18
20	50	229	1280	182	157	1110	464	342	78	25	21	16
21	47	211	1340	180	155	695	682	305	394	[illegible]	20	16
22	47	184	1310	177	152	637	808	230	338	[illegible]	19	15
23	45	162	1280	175	147	1180	858	155	202	23	17	12
24	45	146	1260	172	145	1180	866	192	130	24	16	12
25	44	134	1260	172	141	1190	803	377	90	23	19	11
26	44	128	1210	190	136	1160	709	578	61	21	18	10
27	43	118	1260	192	134	700	601	412	62	23	17	10
28	41	132	1290	205	132	1290	436	412	65	28	16	10
29	38	150	1220	248	---	1410	332	565	65	26	16	9.0
30	36	149	1080	308	---	1340	281	419	61	25	17	11
31	34	---	817	356	---	1320	---	342	---	23	18	---
TOTAL	1573	2979	20663	7833	5664	16829	24384	8767	3156	1209	853	409.0
MEAN	50.7	99.3	667	253	202	543	813	283	105	39.0	27.5	13.6
MAX	74	240	1340	592	394	1410	1300	578	394	69	59	18
MIN	34	34	30	172	132	24	269	113	59	21	16	9.0

CAL YR 1977 TOTAL 69780.0 MEAN 191 MAX 1340 MIN 14
WTR YR 1978 TOTAL 94319.0 MEAN 258 MAX 1410 MIN 9.0

03130500 TOUBY RUN AT MANSFIELD, OH

LOCATION.--Lat 40°45'53", long 82°32'43", in NW 1/4 sec. 20, T.21 N., R.18 W., Richland County, Hydrologic Unit 05040002, on left bank 100 ft (30 m) downstream from West 4th Street Bridge at west edge of Mansfield, and 2 mi (3 km) upstream from mouth.

DRAINAGE AREA.--5.44 mi² (14.1 km²).

PERIOD OF RECORD.--August 1946 to September 1978 (Discontinued)

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder and broad-crested weir. Datum of gage is 1,216.42 ft (370.765 m) National Geodetic Vertical Datum of 1912 (levels by city of Mansfield).

REMARKS.--Records poor. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--32 years, 5.12 ft³/s (0.145 m³/s), 12.78 in/yr 325 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 965 ft³/s (27.3 m³/s) June 6, 1947, gage height, 4.17 ft (1.271 m), from rating curve extended above 160 ft³/s (4.53 m³/s) on the basis of slope-area measurements at gage heights 2.49 ft (0.759 m) and 4.17 ft (1.27 m) and computation of flow over dam at gage height 3.94 ft (1.201 m): no flow July 29, 1975 and part of each day Sept. 4, 1965, Nov. 10, 1967, July 30, 31, Aug. 1, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.66 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 14	0630	*276	7.82	*2.02	0.616	May 24	0030	267	7.56	1.99	0.607
Mar. 14	1330	201	5.69	1.76	0.536						

Minimum discharge 0.10 ft³/s (0.003 m³/s) Jan. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	1.9	27	.30	14	3.3	4.8	1.4	1.9	1.2	.79	.97
2	1.9	1.2	8.0	.20	13	3.3	5.9	1.4	3.0	8.4	.79	.79
3	.97	.97	4.3	.40	11	3.2	24	1.4	1.7	3.0	18	.79
4	.97	11	5.2	.30	9.4	3.2	19	1.7	1.4	1.2	.79	.79
5	.97	2.3	8.0	.40	8.2	3.1	13	2.3	1.4	1.2	.64	.79
6	3.8	.64	12	.30	7.4	3.1	32	1.4	1.4	1.2	.50	.79
7	.79	1.9	5.8	.97	6.8	3.1	19	1.2	9.1	1.2	8.4	.79
8	20	.97	7.1	32	6.4	3.0	11	8.4	2.6	1.2	1.7	.64
9	7.8	.64	3.0	9.1	6.0	3.0	9.1	5.9	1.7	.97	13	.50
10	1.9	5.3	1.2	19	5.8	3.5	8.4	1.7	1.4	.97	3.4	.50
11	1.4	1.2	.50	18	5.6	10	13	1.4	1.4	.97	1.4	.50
12	1.2	.79	.64	13	5.4	20	4.3	5.3	5.9	1.2	1.2	2.3
13	.97	.64	21	9.4	5.2	32	3.4	32	1.9	1.2	1.2	1.2
14	.97	.64	135	7.2	5.0	152	2.6	7.1	1.4	.97	1.2	.97
15	1.2	.97	21	5.0	4.8	46	1.9	7.1	1.4	.97	1.2	.64
16	1.9	18	16	3.6	4.6	31	1.9	4.8	1.4	.97	1.2	3.8
17	1.2	24	13	2.7	4.5	23	1.9	3.8	1.7	.97	1.2	.97
18	1.7	3.4	13	2.0	4.4	18	14	3.8	12	.97	1.2	.50
19	2.3	1.7	5.3	1.7	4.3	32	37	2.6	14	.97	1.9	.50
20	1.2	1.2	10	1.6	4.2	42	46	4.8	1.9	.97	.97	.50
21	1.2	4.8	4.3	1.4	4.0	72	24	3.0	1.9	.97	.64	.50
22	1.2	3.2	3.4	1.3	3.9	32	11	1.7	1.7	.97	.79	.50
23	1.2	2.8	2.6	1.5	3.8	24	6.5	3.0	1.7	3.0	.64	.50
24	1.2	2.4	15	2.0	3.7	18	6.5	77	1.7	.97	.64	.50
25	1.2	2.1	15	10	3.6	14	4.3	13	1.4	.97	.79	.40
26	1.7	3.0	3.8	93	3.5	20	3.4	5.3	1.9	.97	.64	.30
27	1.2	2.0	3.8	56	3.5	12	3.0	3.8	3.4	5.9	.97	.20
28	1.4	2.3	2.6	30	3.4	8.5	2.3	2.6	1.9	1.7	3.0	.30
29	1.2	2.7	1.2	22	---	10	1.7	2.3	1.2	.79	3.0	.30
30	1.2	4.4	.64	18	---	4.6	1.4	6.5	1.2	.79	1.9	.50
31	1.2	---	.40	14	---	5.3	---	2.6	---	.79	1.4	---
TOTAL	75.44	109.06	369.78	376.37	165.4	658.2	336.3	220.3	86.6	48.52	75.09	23.23
MEAN	2.43	3.64	11.9	12.1	5.91	21.2	11.2	7.11	2.89	1.57	2.42	.77
MAX	20	24	135	93	14	152	46	77	14	8.4	18	3.8
MIN	.79	.64	.40	.20	3.4	3.0	1.4	1.2	1.2	.79	.50	.20
CFSM	.45	.67	2.19	2.22	1.09	3.90	2.06	1.31	.53	.29	.45	.14
IN.	.52	.75	2.53	2.57	1.13	4.50	2.30	1.51	.59	.33	.51	.16

CAL YR 1977 TOTAL 1722.79 MEAN 4.72 MAX 135 MIN .30 CFSM .87 IN 11.78
WTR YR 1978 TOTAL 2544.29 MEAN 6.97 MAX 152 MIN .20 CFSM 1.28 IN 17.40

03131500 BLACK FORK AT LOUDONVILLE, OH

LOCATION.--Lat 40°38'09", long 82°14'22", in NW 1/4 sec. 1, T.19 N., R.16 W., Ashland County, Hydrologic Unit 05040002, on right bank at upstream side of bridge on State Highway 3 at Loudonville, 1.5 mi (2.4 km) downstream from Big Run.

DRAINAGE AREA.--349 mi² (904 km²).

PERIOD OF RECORD.--May 1931 to current year.

REVISED RECORDS.--WSP 873: 1935. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 929.16 ft (283.208 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 23, 1941, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods which are fair. Flow regulated since 1936 by Charles Mill Lake, 16 mi (26 km) upstream from station (see station 03129500). Records include diversion from Clear Fork Reservoir which enters the Black Fork drainage as sewage effluent from the city of Mansfield (see REMARKS for station 03133500). Water-quality data collected at this site 1958, 1969 to 1977.

AVERAGE DISCHARGE.--47 years, 342 ft³/s (9.685 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,460 ft³/s (240 m³/s) July 5, 1969, gage height, 14.11 ft (4.301 m), from rating curve extended above 4,000 ft³/s (113 m³/s) on basis of contracted-opening measurement of peak flow; minimum daily, 29 ft³/s (0.82 m³/s) Aug. 7, 8, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,880 ft³/s (110 m³/s) Dec. 15, gage height, 10.85 ft (3.307 m); minimum daily, 52 ft³/s (1.47 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	217	116	929	809	610	230	1640	447	468	176	102	95
2	194	124	521	637	610	220	1580	411	343	176	99	88
3	170	118	465	506	577	210	1670	374	320	277	215	81
4	142	133	512	429	525	210	1390	320	283	208	178	81
5	131	211	583	394	460	200	1700	317	244	196	118	77
6	163	130	704	371	430	200	1690	304	193	193	112	77
7	149	139	560	353	400	190	1520	292	211	184	115	77
8	271	173	484	761	360	190	1680	292	248	178	156	77
9	334	159	459	755	340	180	1590	444	211	166	127	73
10	229	178	423	531	320	180	1550	423	199	156	377	69
11	212	190	391	518	310	220	1600	397	190	152	173	67
12	205	178	360	506	300	390	1400	394	184	142	152	77
13	194	170	368	512	300	475	1070	687	234	133	136	130
14	183	156	2280	493	290	2290	889	687	193	133	124	88
15	175	159	3110	450	290	2340	687	637	187	133	121	85
16	184	196	761	406	280	855	563	731	181	121	115	77
17	177	481	731	391	280	701	499	684	178	115	112	97
18	161	347	1080	374	270	1080	499	728	205	112	104	77
19	161	411	1480	350	270	1560	1200	658	1350	110	102	77
20	164	388	1590	347	270	1810	1240	586	610	107	112	73
21	151	385	1690	340	260	2320	1290	580	644	104	95	71
22	145	343	1610	327	260	1270	1180	471	547	104	92	69
23	141	295	1560	317	260	1810	1130	385	417	102	92	63
24	136	274	1530	320	250	1630	1170	1280	292	130	92	59
25	132	241	2070	366	250	1610	1070	821	254	107	90	57
26	136	248	1580	876	240	1980	954	812	190	104	90	55
27	140	211	1480	676	240	1870	830	634	205	99	88	55
28	134	205	1540	651	230	1780	693	617	221	173	95	55
29	127	237	1470	593	---	1890	563	788	196	115	99	52
30	121	289	1370	570	---	1750	496	654	187	104	110	65
31	117	---	1070	590	---	1670	---	728	---	102	107	---
TOTAL	5296	6885	34761	15523	9482	33311	35033	17583	9385	4412	3900	2244
MEAN	171	230	1121	501	339	1075	1168	567	313	142	126	74.8
MAX	334	481	3110	876	610	2340	1700	1280	1350	277	377	130
MIN	117	116	360	317	230	180	496	292	178	99	88	52

CAL YR 1977 TOTAL 137767 MEAN 377 MAX 3110 MIN 84
WTR YR 1978 TOTAL 177815 MEAN 487 MAX 3110 MIN 52

03133500 CLEAR FORK BELOW PLEASANT HILL DAM, NEAR PERRYSVILLE, OH

LOCATION.--Lat 40°37'13", long 82°19'28", in NE 1/4 sec. 7, T.19 N., R.16 W., Ashland County, Hydrologic Unit 05040002, on right bank 0.2 mi (0.3 km) downstream from Pleasant Hill Dam, 2.8 mi (4.5 km) south of Perrysville, and 4.7 mi (7.6 km) upstream from the confluence of Clear Fork and Black Fork.

DRAINAGE AREA.--198 mi² (513 km²).

PERIOD OF RECORD.--October 1938 to current year. Published as Clear Fork near Perrysville prior to 1940. Monthly discharge only for October 1938, published in WSP 1305.

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 967.00 ft (294.741 m) National Geodetic Vertical Datum of 1912. Prior to May 1, 1947, water-stage recorder at site 0.5 mi (0.8 km) downstream at datum 4.88 ft (1.487 m) lower.

REMARKS.--Records good. Flow regulated by Pleasant Hill Lake (see station 03133000). Water diverted from Clear Fork Reservoir (upstream from Pleasant Hill Lake) for municipal supply of city of Mansfield since 1953; diversion not included in figures of daily discharge. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--40 years, 195 ft³/s (5.522 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,340 ft³/s (65.3 m³/s) Jan. 23, 1959, gage height, 4.89 ft (1.490 m); minimum daily, 0.6 ft³/s (0.017 m³/s) Nov. 2, 4, 1938.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,290 ft³/s (36.5 m³/s) Mar. 27, gage height, 3.74 ft (1.140 m); minimum daily, 31 ft³/s (0.878 m³/s) Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	46	508	463	489	89	848	221	267	162	47	43
2	103	48	632	459	489	105	819	211	245	151	46	40
3	96	48	507	367	470	99	872	201	205	162	54	39
4	83	48	490	215	485	91	884	190	173	153	57	38
5	74	49	486	187	484	92	810	199	153	136	53	35
6	74	50	485	187	481	92	614	194	138	124	52	34
7	71	53	445	187	481	92	648	183	138	114	53	34
8	84	54	284	190	324	92	477	178	153	105	52	36
9	149	53	224	197	153	92	476	207	140	95	56	41
10	165	55	225	250	155	97	716	221	126	90	85	37
11	146	53	224	499	155	104	559	211	112	82	77	35
12	126	50	175	663	155	103	341	200	106	76	68	36
13	110	47	181	651	155	190	277	278	108	73	60	39
14	98	46	324	413	155	165	280	457	101	73	55	38
15	89	47	603	278	155	450	263	473	94	68	52	38
16	83	53	885	225	155	567	239	450	89	67	49	36
17	77	80	913	177	155	597	218	411	87	62	47	36
18	72	113	834	177	155	710	210	393	92	58	45	35
19	70	106	935	177	155	839	400	386	506	56	45	35
20	67	96	1020	177	155	880	487	340	706	53	45	34
21	63	95	998	177	112	914	519	316	646	53	41	33
22	61	96	887	177	48	1070	540	290	303	53	39	35
23	57	95	850	176	49	1150	543	261	187	52	38	37
24	55	93	803	165	102	992	750	430	157	52	37	34
25	54	89	801	140	142	826	870	778	138	44	37	32
26	55	88	787	144	142	877	819	778	136	41	36	33
27	54	82	735	144	96	1240	505	651	284	53	39	33
28	53	81	771	144	75	1270	276	603	465	51	42	31
29	50	75	818	145	---	1130	230	461	442	49	40	33
30	47	84	679	148	---	860	230	270	178	47	40	36
31	45	---	467	334	---	844	---	245	---	47	45	---
TOTAL	2502	2073	18976	8053	6327	16719	15720	10687	6675	2502	1532	1076
MEAN	80.7	69.1	612	260	226	539	524	345	223	80.7	49.4	35.9
MAX	165	113	1020	663	489	1270	884	778	706	162	85	43
MIN	45	46	175	140	48	89	210	178	87	41	36	31
+	13.4	12.7	11.8	12.7	14.1	15.1	12.5	13.5	15.0	13.3	13.0	13.5

CAL YR 1977 TOTAL 68445 MEAN 188 MAX 1020 MIN 32 (+) 14.5
WTR YR 1978 TOTAL 92842 MEAN 254 MAX 1270 MIN 31 (+) 13.5

+ Diversion in cubic feet per second, from Clear Fork Reservoir for municipal supply; furnished by city of Mansfield.

03135000 LAKE FORK BELOW MOHICANVILLE DAM, NEAR MOHICANVILLE, OH

LOCATION.--Lat 40°43'24", long 82°09'18", in sec. 3, T.20 N., R.15 W., Ashland County, Hydrologic Unit 05040002, on right bank 800 ft (244 m) downstream from Mohicanville Dam, 2 mi (3 km) east of Mohicanville, and 2.4 mi (3.9 km) downstream from the confluence of Jerome and Muddy Forks.

DRAINAGE AREA.--271 mi² (702 km²).

PERIOD OF RECORD.--October 1938 to current year. Published as Lake Fork near Mohicanville prior to 1940.

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 930.00 ft (283.464 m) National Geodetic Vertical Datum of 1912. Prior to July 25, 1949, water-stage recorder at site 500 ft (152 m)

REMARKS.--Records good. Flow regulated by Mohicanville Reservoir (see station 03138500). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--40 years, 234 ft³/s (6.627 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,490 ft³/s (155 m³/s) July 5, 1969, gage height, 14.32 ft (4.365 m); minimum daily, 1 ft³/s (0.028 m³/s) June 10, 1947, Jan. 25, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,210 ft³/s (34.3 m³/s) Dec. 14., gage height, 7.77 ft (2.368 m); minimum daily, 16 ft³/s (0.45 m³/s) Sept. 11, 25-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	40	989	992	436	99	926	1080	434	59	27	29
2	85	39	993	982	331	100	920	1070	200	65	25	23
3	64	40	622	837	274	97	1040	1080	154	204	73	19
4	56	42	401	482	244	100	1100	1070	129	155	82	18
5	48	56	314	294	221	107	1110	1060	115	104	43	17
6	54	52	674	176	180	137	1110	781	102	82	34	17
7	53	64	451	158	170	173	1110	438	103	68	46	17
8	79	105	326	646	162	335	1110	311	119	63	50	17
9	180	91	545	975	155	566	1110	550	104	56	42	17
10	140	88	360	705	147	370	1110	520	90	52	342	17
11	99	136	285	560	147	34	1110	269	78	50	165	16
12	80	100	251	359	141	27	1110	209	72	47	88	21
13	69	79	240	244	130	154	1100	456	112	45	60	36
14	64	71	922	215	126	463	1100	744	87	56	46	25
15	59	68	937	192	122	42	1110	788	76	65	40	25
16	57	75	1020	159	119	29	1090	806	69	47	36	21
17	62	462	1020	157	115	328	1110	774	65	39	33	19
18	62	457	1010	158	110	924	1110	747	67	36	29	19
19	60	213	1010	148	106	926	1120	662	677	34	28	22
20	60	150	1010	142	109	927	1110	417	441	32	26	21
21	57	140	1000	152	110	925	1120	326	182	32	24	19
22	52	152	989	141	106	930	1110	251	124	32	24	17
23	48	132	1000	129	105	928	1110	210	97	33	23	17
24	45	120	1040	137	107	922	1100	579	83	56	22	17
25	46	115	1050	178	110	922	1100	793	74	37	22	16
26	46	118	1020	629	107	936	1110	767	78	34	23	16
27	46	104	1020	745	114	913	1100	699	129	33	21	16
28	45	100	1010	963	107	921	1090	486	113	46	26	16
29	42	86	996	882	---	930	1090	271	85	35	28	16
30	41	136	1000	707	---	936	1100	183	67	30	29	22
31	39	---	992	557	---	931	---	540	---	28	36	---
TOTAL	2006	3631	24497	13801	4411	16132	32746	18937	4326	1755	1593	588
MEAN	64.7	121	790	445	158	520	1092	611	144	56.6	51.4	19.6
MAX	180	462	1050	992	436	936	1120	1080	677	204	342	36
MIN	39	39	240	129	105	27	920	183	65	28	21	16

CAL YR 1977 TOTAL 88858 MEAN 243 MAX 1140 MIN 18
WTR YR 1978 TOTAL 124423 MEAN 341 MAX 1120 MIN 16

03136000 MOHICAN RIVER AT GREER, OH

LOCATION.--Lat 40°39'53", long 82°11'44", in NW 1/4 sec. 10, T.8 N., R.10 W., Knox County, Hydrologic Unit 05040002, on left bank 3,000 ft (914 m) downstream from bridge on State Highway 514 at Greer, 5 mi (8 km) upstream from Negro Run, and 7 mi (11 km) downstream from Lake Fork.

DRAINAGE AREA.--948 mi² (2.455 km²).

PERIOD OF RECORD.--September 1921 to current year.

REVISED RECORDS.--WSP 623: 1924(M). WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 872.91 ft (266.063 m) National Geodetic Vertical Datum of 1912. Prior to July 22, 1931, nonrecording gage at site 3,000 ft (914 m) upstream at same datum.

REMARKS.--Records fair 1978, poor 1977. Flow regulated by Charles Mill Lake on Black Fork, 30 mi (48 km) upstream, Pleasant Hill Lake on Clear Fork, 17 mi (27 km) upstream, and Mohicanville Reservoir on Lake Fork, 19 mi (31 km) upstream, beginning August 1936. (See stations 03129500, 03133000, and 03134500). Water-quality data collected at this site 1965 to 1976.

AVERAGE DISCHARGE.--57 years, 895 ft³/s (25.35 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,500 ft³/s (581 m³/s) July 5, 1969, gage height, 14.59 ft (4.447 m) from rating curve extended above 14,000 ft³/s (396 m³/s) on basis of contracted-opening measurement of peak flow; minimum daily, 73 ft³/s (2.07 m³/s) Sept. 26, 27, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 27.0 ft (8.23 m), discharge, 55,000 ft³/s (1,560 m³/s) (estimated).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,410 ft³/s (210 m³/s) Apr. 23, gage height 7.30 ft (2.225 m); maximum gage height, 7.70 ft (2.347 m) Feb. 24, 25 (ice jam); minimum daily, 137 ft³/s (3.88 m³/s) Sept. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	225	384	343	220	230	2800	1240	531	285	880	219	153
2	216	462	370	220	220	2500	3170	545	254	535	207	159
3	205	404	360	210	210	2300	5420	845	233	359	191	219
4	192	365	360	210	200	2000	3170	687	217	678	182	211
5	184	330	350	210	190	1800	4310	1590	213	1170	206	155
6	183	307	370	200	180	1500	3550	1360	384	707	337	173
7	191	285	400	200	180	1300	3550	1300	335	502	577	213
8	187	275	474	200	180	1200	3390	1090	283	1380	613	171
9	187	260	488	200	180	1000	3300	922	329	788	578	158
10	288	255	401	190	190	900	3170	792	384	501	424	154
11	228	250	390	190	200	845	3130	682	291	394	362	155
12	210	244	370	190	230	810	3030	594	279	599	473	137
13	201	235	360	190	500	3090	2300	539	261	620	397	156
14	199	226	350	190	1050	2550	1420	479	244	386	307	491
15	188	221	340	190	930	2360	1130	387	232	303	272	456
16	184	218	330	190	738	2240	932	347	219	263	251	557
17	193	216	321	190	580	1980	808	347	211	316	238	1240
18	180	216	312	190	500	3050	702	334	254	325	216	1070
19	179	214	308	190	470	3040	558	331	229	336	192	1590
20	187	212	320	190	440	3140	513	324	201	304	181	1620
21	247	208	342	190	420	3050	548	308	187	265	175	1340
22	227	208	363	190	400	3180	513	283	173	1390	403	1040
23	201	201	330	190	3500	3170	513	302	167	882	381	845
24	242	190	283	190	2700	2950	748	345	166	478	259	701
25	474	195	270	190	2300	2740	754	305	195	457	238	643
26	426	321	250	190	2000	2410	653	283	227	537	214	470
27	355	305	240	200	3400	1840	879	265	176	462	196	370
28	319	316	230	210	3100	1650	712	253	180	316	186	280
29	305	473	230	230	---	1940	756	239	223	246	173	248
30	292	395	220	230	---	1710	842	220	225	262	159	234
31	405	---	220	240	---	1430	---	216	---	245	168	---
TOTAL	7509	8990	10345	9230	28218	56015	56177	17193	7224	16948	8997	15470
MEAN	242	300	334	201	930	2149	1873	555	241	547	290	515
MAX	474	398	488	230	3500	3130	5420	1590	389	1390	613	1620
MIN	179	190	220	190	190	810	513	216	166	245	168	137

CAL YR 1976 TOTAL 298102 MEAN 814 MAX 5110 MIN 154
WTR YR 1977 TOTAL 247921 MEAN 679 MAX 5420 MIN 137

03136000 MOHICAN RIVER AT GREER, OH--Continued

EXTREMES FOR CURRENT YEAR.--Maximum discharge 6,440 ft³/s (182 m³/s) Dec. 15 gage height 6.94 ft (2.115 m); maximum gage height, 7.52 ft (2.292 m) Jan. 27 (ice jam); minimum daily, 160 ft³/s (4.53 m³/s) Sept. 9-12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	342	207	2540	1760	1400	480	3200	1620	1310	554	219	250
2	530	213	2400	1620	1300	470	3060	1550	981	536	220	230
3	399	216	1860	1550	1200	460	3190	1530	810	725	250	210
4	342	215	1610	1220	1100	460	3140	1490	705	685	320	190
5	297	309	1650	746	1000	445	3370	1500	636	590	300	180
6	297	247	2090	608	900	430	3210	1380	554	528	270	170
7	334	247	1740	563	850	414	3190	1080	560	477	280	170
8	366	380	1510	1320	800	400	3050	922	650	453	310	170
9	882	365	1180	1760	750	390	2910	1160	710	422	290	160
10	750	338	1100	1330	700	410	2960	1280	600	392	746	160
11	602	441	1000	1390	680	480	3070	1050	520	370	627	160
12	520	406	900	1740	660	685	2630	922	500	356	422	160
13	453	344	822	1530	640	1050	2160	1320	520	335	349	265
14	408	311	4520	1040	620	3530	2000	1880	500	328	309	225
15	374	305	5420	777	600	4150	1810	1810	460	349	283	209
16	350	326	2670	660	590	1970	1710	1840	430	315	265	198
17	358	825	2430	618	580	1660	1640	1770	410	296	247	219
18	326	1110	2620	600	570	2380	1640	1740	400	277	236	209
19	318	849	3020	560	560	3110	2720	1710	2310	265	225	198
20	318	730	3200	540	560	3600	2730	1490	1750	259	225	193
21	297	695	3270	520	560	4480	3090	1330	1560	253	214	188
22	278	727	2980	510	550	3800	2760	1160	1170	253	193	183
23	264	647	2870	500	550	4050	2590	1030	843	253	188	188
24	252	597	2810	480	540	3620	2680	1760	646	302	188	174
25	245	542	3390	600	520	3310	2800	2110	572	271	183	169
26	245	539	2910	2120	500	3900	2630	2080	545	236	183	169
27	252	494	2660	1600	490	4760	2360	1840	831	247	183	169
28	245	453	2850	1400	480	4130	1950	1660	1450	296	193	169
29	235	465	2700	1300	---	3940	1750	1480	1140	265	214	164
30	225	579	2510	1200	---	3490	1690	1250	636	236	219	179
31	215	---	1980	1300	---	3230	---	1340	---	225	260	---
TOTAL	11319	14122	75232	33462	20250	69684	77690	46084	24709	11349	8611	5678
MEAN	365	471	2427	1079	723	2248	2590	1487	824	366	278	189
MAX	882	1110	5420	2120	1400	4760	3370	2110	2310	725	746	265
MIN	215	207	822	480	480	390	1640	922	400	225	183	160

CAL YR 1977 TOTAL 321750 MEAN 882 MAX 5420 MIN 137
WTR YR 1978 TOTAL 398190 MEAN 1091 MAX 5420 MIN 160

03136400 NORTH BRANCH KOKOSING RIVER NEAR FREDERICKTOWN, OH

LOCATION.--Lat 40°30'15", long 82°33'46", Knox County, Hydrologic Unit 05040003, on left bank, 0.8 mi (1.3 km) downstream from dam at North Branch Kokosing River Lake, 1.7 mi (2.7 km) northwest of Fredericktown, and 2.2 mi (3.5 km) upstream from East Branch.

DRAINAGE AREA.--46.0 mi² (119 km²). Area at site used prior to October 1, 1974, 45.5 mi² (118 km²).

PERIOD OF RECORD.--Occasional discharge measurements, water years 1962-72, and annual maximum, water years, 1963-72. July 1973 to September, 1978 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 1,086.07 ft (331.034 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1974 at site 0.3 mi (0.5 km) upstream at datum 5.96 ft (1.817 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by North Branch Kokosing River Lake 0.8 mi (1.3 km) upstream (see station 03136300), since June 1972. Water-quality data collected at this site 1965 to 1971, 1973 to 1977.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,000 ft³/s (170 m³/s) May 19, 1969, gage height, 9.95 ft (3.033 m) from rat'ng extended above 3,700 ft³/s (105 m³/s) at site and datum then in use; minimum daily, 0.45 ft³/s (0.013 m³/s) June 12-15,1976.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in January 1959 reached a stage of 13.4 ft (4.08 m) at site and datum then in use, from floodmarks, discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 726 ft³/s (20.6 m³/s) Mar. 27, gage height, 5.82 ft (1.774 m); minimum daily, 0.91 ft³/s (0.026 m³/s) Sept. 25-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	5.7	177	32	64	17	95	31	30	17	4.7	4.1
2	23	5.7	152	30	57	17	76	29	26	15	4.3	3.3
3	16	5.7	74	28	48	17	91	27	23	16	6.2	2.7
4	11	5.7	48	24	43	17	127	26	21	16	7.2	2.3
5	8.5	5.7	43	24	40	17	116	27	19	16	4.9	2.0
6	8.5	5.7	77	23	38	17	164	28	17	14	4.7	1.8
7	8.5	6.1	56	24	34	17	262	27	18	13	4.9	1.4
8	13	6.6	41	247	32	17	154	26	23	12	4.7	1.4
9	31	6.6	36	288	31	17	97	43	22	11	4.0	1.3
10	32	6.1	28	116	29	17	76	41	18	10	3.8	1.2
11	23	6.1	24	74	29	18	73	33	16	9.4	3.4	1.1
12	16	6.1	22	55	27	22	80	29	16	8.9	3.0	1.1
13	12	5.7	24	45	27	83	61	109	17	8.5	2.7	.95
14	10	5.7	508	41	27	425	51	147	17	8.0	2.4	1.1
15	8.5	5.7	689	36	24	638	45	104	16	7.5	2.4	1.4
16	8.0	7.0	656	32	23	615	41	82	15	7.0	2.4	1.3
17	7.0	16	575	31	22	561	39	76	15	6.2	2.4	1.1
18	7.0	22	266	29	22	258	39	121	14	5.8	2.4	1.4
19	7.0	19	164	27	21	181	224	99	82	5.5	2.8	1.3
20	6.1	15	138	29	20	307	240	61	55	5.3	4.2	1.2
21	5.7	14	122	28	20	525	303	52	33	5.3	3.7	1.1
22	5.3	17	83	25	19	566	185	44	24	5.3	3.3	1.4
23	5.3	17	62	23	19	368	115	39	18	5.3	2.8	1.0
24	4.5	16	57	23	18	203	93	176	15	5.3	2.6	1.1
25	4.5	14	333	32	18	152	73	164	13	5.3	2.4	.91
26	5.3	14	147	143	18	466	57	88	18	5.3	2.3	.91
27	5.3	12	74	172	18	720	47	53	45	4.9	2.1	.91
28	5.7	12	52	211	18	525	41	41	43	4.9	2.8	.91
29	5.7	11	42	166	---	349	38	34	31	4.7	3.2	.91
30	5.7	16	37	125	---	314	34	32	21	4.9	3.0	1.2
31	5.7	---	34	86	---	189	---	34	---	4.9	4.0	---
TOTAL	326.8	310.9	4841	2273	806	7655	3137	1923	741	268.2	109.7	43.80
MEAN	10.5	10.4	156	73.3	28.8	247	105	62.0	24.7	8.65	3.54	1.46
MAX	32	22	689	288	64	720	303	176	82	17	7.2	4.1
MIN	4.5	5.7	22	23	18	17	34	26	13	4.7	2.1	.91

CAL YR 1977 TOTAL 16649.40 MEAN 45.6 MAX 756 MIN 1.3
WTR YR 1978 TOTAL 22435.40 MEAN 61.5 MAX 720 MIN .91

03136500 KOKOSING RIVER AT MOUNT VERNON, OH

LOCATION.--Lat 40°24'20", long 82°30'00", in sec. 2, T.6 N., R.13 W., Knox County, Hydrologic Unit 05040003, on right bank at downstream side of Tilden Avenue Bridge at Mount Vernon, 0.8 mi (1.3 km) downstream from North Branch, and 2.7 mi (4.3 km) upstream from Dry Creek.

DRAINAGE AREA.--202 mi² (523 km²).

PERIOD OF RECORD.--February 1951 to current year.

REVISED RECORDS.--WSP 2107: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 984.16 ft (299.972 m) National Geodetic Vertical Datum of 1929. (levels by Corps of Engineers). Prior to Apr. 3, 1953, nonrecording gage at same site and datum.

REMARKS.--Records good. Some regulation by Knox Lake, capacity, 3,750 acre-ft (4.62 hm³), 8.2 mi (13.2 km) upstream on East Branch of North Branch Kokosing River beginning in 1954 and North Branch Kokosing River Lake 10.0 mi (16.1 km) upstream on North Branch Kokosing River, beginning in June 1972. (see station 03136300). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--25 years, (1954-78), 206 ft³/s (5.834 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,000 ft³/s (1,080 m³/s) Jan. 21, 1959, gage height, 18.19 ft (5.544 m), from rating curve extended above 9,000 ft³/s (255 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 13 ft³/s (0.37 m³/s) Sept. 25, 30, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,070 ft³/s (115 m³/s) Dec. 15, gage height 6.87 ft. (2.094 m); minimum daily, 21 ft³/s (0.59 m³/s) Sept. 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	33	532	160	337	97	382	175	191	103	39	40
2	100	33	503	152	286	95	333	162	162	103	37	35
3	80	36	320	139	250	99	372	152	147	386	49	32
4	60	35	241	130	225	97	443	155	130	276	53	31
5	48	35	259	123	208	91	405	175	118	168	46	29
6	48	36	386	123	194	89	528	175	109	130	48	28
7	61	37	279	125	186	89	859	195	132	107	49	27
8	89	36	225	655	170	87	557	185	269	93	44	28
9	170	36	208	971	162	89	397	279	208	84	41	27
10	175	36	197	483	155	95	333	247	150	76	40	29
11	125	35	191	361	157	107	323	194	123	70	39	27
12	97	36	139	269	139	160	350	178	114	65	37	27
13	78	35	150	222	135	327	289	519	123	59	36	31
14	68	35	2000	202	135	1840	241	583	109	59	36	30
15	59	35	3540	183	127	3510	214	455	99	56	35	29
16	55	40	1480	170	123	2200	194	390	93	55	33	27
17	49	61	1030	160	120	1410	183	365	87	52	33	27
18	45	91	731	155	116	836	194	479	91	48	32	29
19	44	76	557	142	114	655	765	420	330	46	32	27
20	44	65	483	147	120	917	721	303	279	45	34	26
21	42	78	455	142	112	1620	959	272	183	44	32	25
22	41	103	344	132	105	1730	650	234	142	44	30	25
23	40	95	282	135	105	1100	447	211	114	42	29	25
24	39	78	259	155	103	687	393	566	99	46	28	24
25	37	72	697	160	101	553	340	596	91	46	28	22
26	39	70	491	467	99	1520	303	375	97	44	28	22
27	36	65	310	596	97	2530	256	272	191	42	29	22
28	37	61	231	676	97	1270	222	217	217	41	35	21
29	36	56	197	627	---	697	202	186	168	39	35	21
30	36	87	175	499	---	499	191	211	125	41	36	24
31	35	---	165	416	---	423	---	282	---	40	46	---
TOTAL	2023	1627	17057	9079	4278	25519	12046	9158	4491	2550	1149	815
MEAN	65.3	54.2	550	293	153	823	402	295	150	82.3	37.1	27.2
MAX	175	103	3540	971	337	3510	959	596	330	386	53	40
MIN	35	33	139	123	97	87	183	152	87	39	28	21

CAL YR 1977 TOTAL 76069 MEAN 208 MAX 4620 MIN 32
WTR YR 1978 TOTAL 89742 MEAN 246 MAX 3540 MIN 21

03138500 WALHONDING RIVER BELOW MOHAWK DAM, AT WELLIE, OH

LOCATION.--Lat 40°20'29", long 82°03'56", in T.6 N., R.8 W., Coshocton County, Hydrologic Unit 05040003, on right bank at upstream side of bridge on U.S. Highway 36 at Wellie, 0.5 mi (0.8 km) upstream from Mohawk Creek, and 1.7 mi (2.7 km) downstream from Mohawk Dam.

DRAINAGE AREA.--1,505 mi² (3,898 km²).

PERIOD OF RECORD.--December 1910 to March 1913 (gage heights and discharge measurements only), September 1921 to current year. Published as Mohican River at Pomerene 1910-13, as Walhonding River at Pomerene 1921-37, and as Walhonding River at Wellie 1938-39.

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 790.00 ft (240.792 m) National Geodetic Vertical Datum of 1912. Prior to Nov. 7, 1925, nonrecording gage and Nov. 7, 1925, to Sept. 30, 1937, water-stage recorder at site 3.8 mi (6.1 km) upstream at datum 15.53 ft (4.734 m) higher. Oct. 1, 1937, to Sept. 30, 1938, nonrecording gage at present site at datum 2.09 ft (0.637 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated beginning 1936 by 5 flood-control reservoirs at points 1.7 mi (2.7 km) to 58 mi (87 km) upstream (see stations 03129500, 03133000, 03134500, 03136300, and 03138000). Water-quality data collected at this site 1964 to 1977.

AVERAGE DISCHARGE.--57 years, 1,460 ft³/s (41.35 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge at site at Pomerene, 43,800 ft³/s (1,240 m³/s) Jan. 25, 1937; maximum discharge at present site since regulation began at Mohawk Dam, 24,000 ft³/s (680 m³/s) Jan. 25, 26, 1937, gage height, 18.8 ft (5.73 m), present datum (from floodmarks), from rating curve extended above 13,000 ft³/s (368 m³/s); minimum daily discharge, 19 ft³/s (0.54 m³/s) Feb. 27 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 26.9 ft (8.20 m), discharge, 102,000 ft³/s (2,890 m³/s), present site and datum, from information by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,560 ft³/s (271 m³/s) Dec. 14, gage height, 12.56 ft (3.828 m); minimum daily, 233 ft³/s (6.60 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1450	352	3670	2900	1210	780	7510	2660	2220	956	357	437
2	1920	350	4710	2600	876	780	7510	2480	1690	879	350	371
3	978	354	3410	2300	1760	780	7530	2400	1360	1620	357	332
4	756	353	2690	1900	3480	760	7620	2310	1200	2070	556	320
5	616	379	2900	1640	3900	760	7670	2440	1080	1290	485	297
6	583	426	4690	1500	3650	760	7520	2330	963	1040	431	281
7	618	387	3460	1400	4510	750	7560	1890	906	901	421	274
8	618	438	2630	3050	2400	757	7460	1580	1150	832	423	269
9	1330	513	2140	5580	1600	783	7090	1910	1290	761	435	265
10	1440	485	1980	4160	1400	785	7280	2340	1040	691	689	267
11	1140	513	5600	2840	1300	910	7330	1940	987	647	913	266
12	947	547	5280	2400	1200	1200	6360	1650	833	601	689	266
13	816	494	5280	2100	1200	2190	5240	2330	877	566	503	329
14	726	453	5030	1900	1100	2340	4550	4360	903	546	441	368
15	658	464	4550	1600	1100	1150	3130	3990	796	540	404	355
16	614	673	6310	1400	1100	3880	2870	3650	742	527	384	313
17	594	916	6330	1300	1000	4780	2670	3470	706	490	365	293
18	555	1040	6280	1200	1000	6190	2630	3340	680	460	350	329
19	528	1250	6930	1100	900	6480	4200	3330	2780	440	356	297
20	516	1070	7350	1100	940	6800	5240	2780	3370	424	364	288
21	494	1040	7460	1000	900	7110	5630	2400	2610	415	339	279
22	469	1190	7570	1000	860	7030	5870	2110	1950	430	384	270
23	446	1110	7580	1000	840	7190	5550	1830	1380	409	294	263
24	427	1010	6730	1000	820	7190	5040	2550	1080	417	290	260
25	414	907	5930	1100	800	7130	4880	4500	920	456	293	250
26	409	871	5760	2890	800	7030	4570	3850	874	406	286	243
27	407	833	5350	3880	800	5970	4170	3380	1150	387	298	241
28	402	763	4920	3760	800	6410	3430	2840	2620	385	327	241
29	389	733	4500	1680	---	6980	2920	2380	1910	439	342	233
30	377	837	3900	1590	---	7380	2750	2080	1230	382	351	239
31	363	---	3400	1980	---	7500	---	2310	---	368	426	---
TOTAL	22000	21351	154320	64850	42306	120535	163790	83410	41217	20775	12735	8736
MEAN	710	712	4978	2092	1511	3888	5460	2691	1374	670	411	291
MAX	1920	1640	7580	5580	4510	7500	7670	4500	3370	2070	913	437
MIN	363	350	1980	1000	800	750	2630	1580	980	368	286	233

CAL YR 1977 TOTAL 566618 MEAN 1552 MAX 7580 MIN 262
WTR YR 1978 TOTAL 756025 MEAN 2071 MAX 7670 MIN 233

03139000 HILLBUCK CREEK AT HILLBUCK, OH

LOCATION (REVISED).--Lat 40°28'53", long 81°59'10", Holmes County, Hydrologic Unit 05040003, on right bank at downstream side of U.S. highway 62 bridge south of Hillbuck, 1.2 mi (1.9 km) downstream from Black Creek. Prior to Oct. 5, 1976, at site 0.9 mi (1.4 km) upstream.

DRAINAGE AREA.--464 mi² (1,202 km²), revised. Area at site used prior to Oct. 5, 1976, 462 mi² (1,197 km²).

PERIOD OF RECORD.--October 1930 to current year.

REVISED RECORDS.--WSP 873: 1935. WSP 1555: 1935. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 788.05 ft (240.198 m) National Geodetic Vertical Datum of 1912. Prior to Oct. 1, 1949, nonrecording gage and Oct. 1, 1949 to Oct. 5, 1976, water-stage recorder and nonrecording gage, at site 0.9 mi (1.4 km) upstream at same datum.

REMARKS.--Records fair except those for winter periods, which are poor. Water-quality data collected at this site 1962 to 1977. Sediment data collected 1962 to 1969.

AVERAGE DISCHARGE.--48 years, 402 ft³/s (11.38 m³/s), 11.81 in/yr (300 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,500 ft³/s (1,350 m³/s) July 5, 1969, gage height, 26.40 ft (8.047 m) (from floodmarks), from rating curve extended above 11,000 ft³/s (312 m³/s) on basis of slope-area measurement of peak flow at site then in use; minimum, 23 ft³/s (0.65 m³/s) Sept. 10-15, 28-30, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft³/s (56.6 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 18	1300	3480	98.6	15.18	4.627	Mar. 22	1200	3400	96.3	15.14	4.615
Mar. 15	---	*4000	113	a*15.92	4.852	Mar. 27	1600	3280	92.9	15.08	4.596

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	358	107	1140	440	840	230	1380	485	601	252	103	155
2	491	114	1100	398	780	220	1180	451	544	269	95	113
3	262	113	931	370	680	220	1110	414	440	411	98	100
4	194	108	795	350	600	210	1140	396	365	398	154	92
5	168	125	942	320	560	210	1130	589	320	316	140	86
6	179	115	1620	300	520	210	1210	562	289	267	150	82
7	187	126	1270	300	500	210	1490	482	282	240	158	79
8	227	247	1028	734	480	210	1440	454	562	228	128	75
9	503	240	771	1130	450	210	1330	625	1130	220	147	72
10	466	232	747	1000	430	240	1180	656	559	193	827	70
11	337	335	744	900	410	300	1070	587	349	153	623	73
12	261	277	675	780	390	450	953	528	293	145	533	78
13	223	223	607	680	370	960	837	810	305	131	385	164
14	201	197	1130	600	360	1700	730	1230	286	147	260	112
15	183	189	1550	520	350	4000	657	1250	256	185	198	240
16	171	196	1740	450	340	3600	595	1210	231	156	163	125
17	171	498	3030	420	330	3800	533	1120	218	135	148	206
18	169	571	3210	400	310	2800	507	1380	242	133	130	122
19	163	488	3010	380	300	2600	1040	1310	1010	122	123	107
20	154	369	2990	360	290	2300	1270	1310	773	116	140	98
21	142	458	2210	340	280	2800	1450	1270	563	113	112	92
22	138	477	1640	330	270	3210	1480	1160	420	111	101	94
23	137	379	1320	330	260	2870	1400	974	320	108	95	92
24	126	325	1080	350	260	2550	1320	1030	278	107	91	83
25	121	280	1030	380	250	2150	1140	1110	245	169	87	77
26	121	269	907	1200	250	2380	1000	1000	246	140	84	75
27	120	232	847	1100	240	3120	849	908	326	122	82	74
28	117	214	762	1000	240	3040	726	793	841	116	98	75
29	111	196	698	920	---	2610	629	687	524	113	113	75
30	108	307	583	880	---	2020	555	578	311	109	113	103
31	109	---	503	940	---	1610	---	581	---	108	185	---
TOTAL	6416	8017	40602	18615	11320	52240	31341	25949	13132	5613	5857	3088
MEAN	207	267	1310	600	404	1685	1045	837	438	181	189	103
MAX	503	571	3210	1200	840	4000	1490	1380	1130	411	827	240
MIN	108	107	503	300	240	210	507	396	218	108	82	70
CFSM	.45	.58	2.82	1.29	.87	3.63	2.25	1.80	.94	.39	.41	.22
IN.	.51	.64	3.26	1.49	.91	4.19	2.51	2.08	1.05	.45	.47	.25

CAL YR 1977 TOTAL 159489 MEAN 437 MAX 3350 MIN 60 CFSM .94 IN 12.78
WTR YR 1978 TOTAL 222193 MEAN 609 MAX 4000 MIN 70 CFSM 1.31 IN 17.81

a Ice jam

Minimum discharge 69 ft³/s (1.95 m³/s) Sept. 10.

03140000 MILL CREEK NEAR COSHOCTON, OH

LOCATION.--Lat 40°21'46", long 81°51'45", Coshocton County, Hydrologic Unit 05040003, on left bank 0.5 mi (0.8 km) downstream from Little Mill Creek and 6 mi (10 km) north of Coshocton.

DRAINAGE AREA.--27.2 mi² (70.4 km²).

PERIOD OF RECORD.--October 1936 to current year. Monthly discharge only for October 1936, published in WSP 1305.

REVISED RECORDS.--WSP 1143: 1946, 1947-48(P). WSP 1907: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 782.00 ft (238.358 m) National Geodetic Vertical Datum of 1912.

REMARKS.--Records good except those for period of no gage height record, which is fair. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--42 years, 27.8 ft³/s (0.787 m³/s), 13.88 in/yr (353 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,720 ft³/s (247 m³/s) July 5, 1969, gage height, 13.92 ft (4.243 m), from rating curve extended above 2,200 ft³/s (62.3 m³/s) on basis of slope-area measurement of peak flow; no flow Sept. 28, 29, 1954, Aug. 29-31, 1962, and part of each day Dec. 23, 31, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s (19.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 1	1345	*5180	*147	*12.86	3.920	Dec. 14	1115	1310	37.1	10.32	3.146
Dec. 5	1815	901	25.5	9.27	2.825	June 28	0015	1770	501	11.02	3.359

Minimum 1.4 ft³/s (0.040 m³/s) Aug. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	941	5.6	276	17	37	13	49	24	17	26	2.8	12
2	105	5.4	111	16	33	13	42	22	20	28	2.5	6.9
3	52	5.4	86	14	29	13	55	20	15	29	2.4	5.2
4	34	5.2	66	11	26	13	59	22	13	21	2.5	4.8
5	27	5.4	491	12	24	12	59	36	13	17	2.2	3.8
6	33	5.4	230	13	23	12	110	26	11	15	32	3.2
7	23	27	103	21	22	12	137	22	17	17	16	2.8
8	55	63	71	253	21	12	81	26	29	23	7.4	2.5
9	106	19	62	150	20	12	60	96	21	14	4.6	2.3
10	61	68	61	90	19	14	53	48	13	12	4.3	2.2
11	43	46	41	56	19	20	50	38	11	10	3.9	2.2
12	34	27	37	35	19	35	42	39	11	8.7	3.4	2.9
13	27	20	55	28	18	90	36	76	11	7.9	3.1	7.1
14	23	18	707	24	18	166	30	187	9.3	8.0	2.7	22
15	20	17	207	21	17	300	27	105	8.1	7.1	2.5	46
16	19	29	115	19	17	160	25	79	7.5	6.5	2.3	8.8
17	17	191	79	18	17	110	23	76	7.1	5.8	2.1	23
18	14	73	62	18	16	76	29	95	10	5.1	1.9	13
19	14	45	52	19	16	80	66	86	36	4.7	3.2	9.4
20	12	36	73	20	16	97	128	54	12	4.4	10	6.9
21	11	83	53	20	15	120	118	48	11	4.4	2.8	5.6
22	10	60	41	17	15	82	71	40	8.4	4.5	2.8	4.6
23	9.1	49	36	16	15	63	58	41	7.2	4.5	1.8	3.9
24	8.5	39	34	16	14	52	56	86	6.5	7.3	1.7	3.6
25	8.8	34	46	41	14	95	49	45	6.1	4.9	1.8	3.4
26	8.5	31	25	464	14	229	43	36	64	4.2	1.7	3.0
27	7.9	25	22	260	14	295	37	31	133	3.8	1.5	2.7
28	7.1	23	19	150	13	134	33	27	410	3.4	2.4	2.5
29	6.4	20	18	80	---	88	30	24	52	2.9	2.0	2.3
30	6.2	156	17	60	---	63	27	22	35	3.1	19	2.5
31	5.8	---	17	45	---	55	---	21	---	3.1	45	---
TOTAL	1749.3	1231.4	3313	2020	541	2530	1683	1560	1025.2	316.3	198.1	221.1
MEAN	56.4	41.0	107	65.4	19.3	81.6	56.1	50.3	34.2	10.2	6.13	7.37
MAX	941	191	707	464	37	300	137	187	410	29	45	46
MIN	5.8	5.2	17	11	13	12	23	20	6.1	2.9	1.5	2.2
CFSM	2.07	1.51	3.93	2.40	.71	3.00	2.06	1.85	1.26	.38	.23	.27
IN.	2.39	1.68	4.53	2.77	.74	3.46	2.30	2.13	1.40	.43	.26	.30

CAL YR 1977 TOTAL 13188.5 MEAN 36.1 MAX 941 MIN 1.0 CFSM 1.33 IN 18.06
WTR YR 1978 TOTAL 16386.4 MEAN 44.9 MAX 941 MIN 1.5 CFSM 1.65 IN 22.41

Note.--No gage-height record Jan. 27 to Mar. 19.

03140500 MUSKINGUM RIVER NEAR COSHOCTON, OH

LOCATION.--Lat 40°16'56", long 81°52'23", in T.5 N., R.6 W., Coshocton County, Hydrologic Unit 05040004, on right bank at upstream side of highway bridge, 1 mi (2 km) southwest of Coshocton, and 2 mi (3 km) downstream from confluence of Tuscarawas and Walhonding Rivers.

DRAINAGE AREA.--4,859 mi² (12,585 km²).

PERIOD OF RECORD.--July 1936 to current year.

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 725.00 ft (222.980 m) National Geodetic Vertical Datum of 1912. Prior to Sept. 19, 1936, nonrecording gage and Sept. 20, 1936 to Sept. 30, 1977, water-stage recorder at same site at datum 500 ft (1.524 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by 13 flood-control reservoirs at points 19 mi (31 km) to 88 mi (142 km) upstream. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--42 years, 4,862 ft³/s (137.7 m³/s). <168 EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 78,700 ft³/s (2,230 m³/s) Jan. 26, 1937, gage height, 21.98 ft (6.700 m); minimum daily, 420 ft³/s (11.9 m³/s) Sept. 13, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of about 28.8 ft (8.78 m), discharge, 202,000 ft³/s (5,720 m³/s), computed by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 22,000 ft³/s (623 m³/s) Mar. 27, gage height, 15.55 ft (4.740 m); minimum daily, 879 ft³/s (24.9 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3830	1860	8440	6610	8300	2630	19100	5820	6080	4270	1450	2830
2	8880	1840	13000	6190	7430	2710	18400	5360	5440	3710	1380	2640
3	6610	1620	12500	5630	7200	2830	17700	5120	4840	4560	1340	2080
4	5600	1610	10000	4910	8340	2840	17600	4870	4350	6630	1440	1770
5	4490	1590	10400	4360	8480	2650	17900	5310	3930	5560	1620	1550
6	3570	1690	16700	4160	7570	2360	17700	5470	3520	4450	1820	1390
7	3310	1720	15900	3930	7260	2320	18800	5080	3300	3770	2250	1290
8	3300	1990	13800	5800	6630	2280	18900	4580	4480	3340	3100	1210
9	4300	2240	12100	12400	4720	2270	18100	6440	7200	3150	3090	1140
10	6100	2380	9760	12300	4230	2340	16600	8440	9050	2900	2980	1100
11	5850	2670	8270	9380	3470	2710	16200	7810	8080	2640	5400	1070
12	4620	3240	7100	8840	3740	3890	14500	6550	7140	2410	5840	1050
13	3860	2880	6840	8080	3720	7390	12300	6530	6570	2230	4300	1240
14	3680	2490	13000	6150	3800	13900	11200	10900	5930	2130	2930	1500
15	3210	2370	18300	7000	3480	17700	9020	12200	4870	3210	2490	2150
16	3020	2570	20800	6150	3340	18000	8470	11800	4600	3420	2140	2190
17	2860	4300	20400	5030	3280	19400	8380	11400	4330	2980	1880	2250
18	2830	6930	19100	4440	3100	20300	8080	12300	3890	2540	1730	2000
19	2800	7060	18800	4100	3000	19900	7540	13200	3560	2380	1640	1870
20	2720	6620	19800	4080	2880	18700	16200	12700	3760	2140	1770	1470
21	2610	4840	19600	3900	2740	19000	12400	11000	7610	1970	1500	1340
22	2500	3560	19200	3900	2700	18500	13500	9220	5800	1800	1370	1220
23	2380	3760	18500	4150	2600	18600	12700	8150	4580	1720	1300	1170
24	2240	5030	17200	3840	2500	19100	11200	8510	3800	1860	1220	1100
25	2140	4450	14900	4180	2500	18800	10400	11100	3360	2420	1170	1040
26	2090	4870	13700	7440	2500	19700	9940	11300	3460	2140	1130	980
27	2050	3800	12700	12100	2500	21700	9130	9620	4180	1820	1100	943
28	2000	3540	12240	11700	2540	21400	7980	7650	4760	1650	1140	925
29	1930	3310	11800	10100	---	21200	6990	6550	7450	1600	1180	897
30	1820	3560	10900	9350	---	20700	6290	5870	5380	1560	1380	879
31	1720	---	7690	8960	---	19700	---	5600	---	1500	2140	---
TOTAL	104470	102260	433230	212240	124980	387120	380730	255650	166280	86520	65230	44134
MEAN	3499	3409	13980	6846	4464	12490	12690	8247	5543	2855	2104	1471
MAX	8880	7060	20800	12400	8440	21700	19100	13200	9050	6630	5840	2830
MIN	1720	1590	6840	3890	2500	2270	6080	4360	3300	1500	1100	879

CAL YR 1977 TOTAL 1811639 MEAN 4963 MAX 20800 MIN 980
WTR YR 1978 TOTAL 2368864 MEAN 6494 MAX 21700 MIN 879

03141500 SENECA FORK BELOW SENECAVILLE DAM, NEAR SENECAVILLE, OH

LOCATION.--Lat 39°55'28", long 81°26'17", Guernsey County, Hydrologic Unit 05040005, on left bank 650 ft (198 m) downstream from Senecaville Dam, and 1.5 mi (2.4 km) southeast of Senecaville.

DRAINAGE AREA.--118 mi² (306 km²).

PERIOD OF RECORD.--September 1938 to current year. Published as Seneca Fork near Senecaville prior to 1940.

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 799.00 ft (243.535 m) National Geodetic Vertical Datum of 1912. Prior to Jan. 24, 1982, at site 150 ft (46 m) downstream at same datum.

REMARKS.--Records fair. Flow regulated by Senecaville Lake (see station 03141000). Water is diverted from Senecaville Lake for U.S. Fish Hatchery; diversion not included in figures of daily discharge. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--40 years, 129 ft³/s (3.653 m³/s) (unadjusted).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 914 ft³/s (25.9 m³/s) Apr. 7, 1968, gage height, 9.35 ft (2.850 m); maximum gage height, 10.35 ft (3.155 m) Feb. 1, 1949; no flow May 3, 4, 1939, Jan. 28, 29, Feb. 4, 5, Apr. 25, 1952.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 622 ft³/s (17.6 m³/s) Dec. 27, gage height, 8.11 ft (2.472 m); minimum daily, 1.2 ft³/s (0.034 m³/s) Mar. 6

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	11	328	2.6	507	102	562	66	44	377	1.8	55
2	69	11	326	2.2	514	260	559	210	44	380	1.8	8.7
3	107	11	325	2.1	508	95	575	223	44	391	2.1	8.7
4	141	11	325	2.1	502	3.0	407	46	44	390	2.1	8.7
5	46	11	338	46	496	1.7	386	4.8	97	218	1.9	8.7
6	3.0	11	6.0	88	490	1.2	482	4.6	63	61	1.7	8.7
7	15	11	5.8	88	483	3.0	401	4.6	44	76	53	8.7
8	21	84	277	90	475	3.2	293	4.8	129	76	88	6.3
9	21	157	485	34	347	3.8	295	4.8	231	78	32	2.2
10	21	102	502	97	49	30	321	4.6	250	78	3.2	2.2
11	70	141	496	354	1.5	42	365	4.8	256	78	3.0	2.1
12	93	186	515	562	5.8	42	167	5.0	260	80	2.6	2.2
13	93	97	537	550	8.7	132	4.2	5.3	267	34	2.6	2.6
14	33	39	334	543	8.7	5.0	80	5.5	86	14	2.8	2.2
15	3.2	168	9.4	534	52	3.2	8.1	306	42	15	2.8	2.1
16	3.4	282	68	524	129	3.6	8.1	406	30	15	2.8	2.1
17	63	325	250	386	193	115	280	404	6.3	15	3.2	2.1
18	100	425	364	132	210	451	160	406	5.0	15	3.2	1.9
19	38	486	509	38	68	589	46	406	4.0	15	3.2	1.9
20	14	459	580	38	9.4	597	290	403	78	6.6	3.0	2.4
21	3.4	304	594	38	9.4	536	415	400	223	1.8	3.4	2.8
22	2.8	326	602	38	9.4	434	358	399	218	1.8	3.4	2.6
23	2.2	348	596	95	9.4	445	397	397	70	1.6	3.4	2.6
24	1.9	332	587	262	9.4	459	358	400	37	1.8	3.4	2.2
25	3.4	331	578	342	9.8	358	97	325	37	1.9	3.4	2.2
26	3.6	331	524	231	9.8	2.1	171	90	37	1.9	3.4	2.2
27	3.6	329	349	16	18	3.0	355	45	100	1.8	3.2	2.6
28	3.6	329	1.9	1.8	40	3.4	160	45	132	1.7	3.0	2.1
29	3.2	293	2.2	1.8	---	328	9.4	45	160	1.8	2.8	2.1
30	3.2	308	2.2	231	---	523	9.4	45	377	1.8	2.8	2.6
31	8.1	---	2.2	388	---	564	---	44	---	2.4	55	---
TOTAL	957.8	6251	10418.7	5757.2	5172.3	6138.2	8019.2	5162.0	3415.3	2432.9	304.0	163.5
MEAN	30.9	208	336	186	185	198	267	167	114	78.5	9.81	5.45
MAX	141	486	602	562	514	597	575	406	377	391	88	55
MIN	1.9	11	1.9	1.8	1.5	1.2	4.2	4.6	4.0	1.6	1.7	1.9
+	2.51	1.67	1.53	1.25	1.55	2.26	2.24	1.39	2.71	3.11	2.73	1.89

CAL YR 1977 TOTAL 38771.3 MEAN 106 MAX 615 MIN 1.8 (+) 2.53
WTR YR 1978 TOTAL 54192.1 MEAN 148 MAX 602 MIN 1.2 (+) 2.07

03142000 WILLS CREEK AT CAMBRIDGE, OH

LOCATION.--Lat 40°00'52", long 81°35'14", Guernsey County, Hydrologic Unit 05040005, on left bank at upstream side of bridge on Campbell Avenue in Cambridge, 0.9 mi (1.4 km) downstream from Leatherwood Creek.

DRAINAGE AREA.--406 mi² (1,052 km²).

PERIOD OF RECORD.--June 1926 to September 1928, May 1937 to current year.

REVISED RECORDS.--WSP 853: 1929(M). WSP 893: 1928. WSP 973: 1982.

GAGE.--Water-stage recorder. Datum of gage is 772.34 ft (235.409 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 6, 1927, nonrecording gage at site 1.5 mi (2.4 km) downstream at different datum. Oct. 6, 1927, to Sept. 30, 1928, and May 22, 1937, to Oct. 18, 1938, nonrecording gage at present site and datum.

REMARKS.--Records good. Flow regulated by Senecaville Lake on Seneca Fork, 22 mi (35 km) upstream, beginning in 1937 (see station 03181000). Water is diverted 2.7 mi (4.3 km) upstream from station for municipal supply of city of Cambridge; diversion not included in figures of daily discharge. Water-quality data collected at this site 1964 to 1975, 1977.

AVERAGE DISCHARGE.--43 years, 440 ft³/s (12.46 m³/s) (unadjusted).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 8,500 ft³/s (241 m³/s) June 6 or 7, 1963; maximum gage height, 22.55 ft (6.873 m) June 6, 1963 (backwater from tributaries); minimum daily discharge, 0.7 ft³/s (0.020 m³/s) Oct. 6, 1960.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 8, 1935, reached a stage of 25.4 ft (7.74 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,550 ft³/s (129 m³/s) Mar. 16, gage height, 17.49 ft (5.331 m); minimum daily, 10 ft³/s (0.28 m³/s) Aug. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	26	742	132	1200	132	912	200	202	575	51	193
2	156	35	844	145	998	172	843	217	158	512	51	135
3	128	38	583	132	973	280	810	295	190	620	40	61
4	132	40	605	99	832	167	861	295	272	1070	38	73
5	135	56	978	89	734	99	730	339	172	960	57	109
6	87	58	2110	119	686	95	732	291	191	841	56	61
7	80	72	2430	191	655	88	1040	204	158	223	77	38
8	90	111	1580	663	632	92	1000	296	613	258	131	30
9	123	183	819	1640	615	99	636	786	1870	481	139	38
10	212	269	912	1660	437	125	345	874	1380	293	79	33
11	125	469	825	1100	195	246	553	446	571	228	46	29
12	114	334	749	889	149	790	587	314	409	191	58	27
13	121	249	724	1610	137	1520	371	390	345	167	48	18
14	114	150	1320	885	130	2410	199	903	494	119	47	14
15	85	184	2090	773	131	3910	236	932	242	107	42	18
16	59	197	1820	717	153	4340	172	834	161	99	28	22
17	52	348	816	685	224	3620	161	814	137	97	22	29
18	88	559	640	516	282	2690	380	1000	102	84	20	45
19	123	566	692	299	284	1780	494	1330	385	79	38	35
20	76	544	784	284	167	1380	452	1210	982	64	31	32
21	66	471	866	208	116	1350	421	836	475	56	29	40
22	44	367	812	280	194	1490	1030	676	420	53	38	36
23	40	384	764	223	97	1290	789	813	486	47	19	34
24	35	371	751	244	95	1030	720	642	292	46	15	33
25	27	338	764	588	95	1130	620	588	139	49	12	38
26	28	336	738	1460	95	1770	509	488	128	53	10	17
27	29	326	648	1850	180	2430	583	274	482	46	12	16
28	39	314	378	1990	187	2850	617	195	1050	40	31	18
29	39	312	158	1900	---	2180	374	174	1580	35	84	22
30	40	302	121	1800	---	1220	230	171	1050	30	116	36
31	37	---	123	1300	---	940	---	221	---	38	112	---
TOTAL	2584	7929	28156	23814	10383	41523	18123	16853	15442	7164	1591	1324
MEAN	83.4	264	908	768	371	1339	604	544	515	231	51.0	44.1
MAX	212	566	2430	1990	1200	4340	1030	1330	1870	1070	139	193
MIN	27	26	121	89	95	88	161	171	102	30	10	14
(+)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

CAL YR 1977 TOTAL 129259.7 MEAN 354 MAX 3350 MIN 7.0 (+) [illegible]
WTR YR 1978 TOTAL 174044.0 MEAN 479 MAX 4340 MIN 10 (+) [illegible]

* Diversion in cubic feet per second furnished by city of Cambridge.

MUSKINGUM RIVER BASIN

03142295 SALT FORK BELOW SALT FORK DAM, NEAR CAMBRIDGE, OH

LOCATION.--Lat 40°06'15", long 81°33'15", T.3 N., R.3 W., Guernsey County, Hydrologic Unit 05040005, at outlet works near left end of Salt Fork Dam, 0.8 mi (1.3 km) upstream from the south and 5.0 mi (8.0 km) north of Cambridge.

DRAINAGE AREA.--159 mi² (412 km²).

PERIOD OF RECORD.--October 1970 to current year.

REVISED RECORDS.--WDR OH-76-1: 1975.

GAGE.--Water-stage recorder and morning-glory spillway control. Datum of gage is 700.00 ft (213.360 m) National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD. Same gage and elevations as Salt Fork Reservoir (station 03142290).

REMARKS.--Records good except those for the period Jan. 22 to Apr. 15 and those below 50 ft³/s (1.416 m³/s), which are fair. Flow completely regulated by Salt Fork Reservoir (see station 03142290). Water-Quality data collected at this site 1971 to 1977.

AVERAGE DISCHARGE.--8 years, 185 ft³/s (4.928 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,830 ft³/s (51.8 m³/s) Feb. 25, 1975, elevation, 805.46 ft (245.504 m) from rating curve extended above 650 ft³/s (18.4 m³/s); no flow at times in 1970-71, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,240 ft³/s (35.1 m³/s) Mar. 16, elevation, 804.37 ft (245.172 m); minimum daily, 4.7 ft³/s (0.13 m³/s) Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	15	49	82	410	53	361	175	185	423	17	27
2	30	15	64	78	380	48	350	165	181	372	16	27
3	28	16	76	70	340	48	340	151	179	355	16	29
4	29	16	84	66	300	48	330	145	169	335	17	42
5	30	17	141	62	280	48	330	151	157	312	16	43
6	31	17	333	62	260	46	340	147	147	295	21	42
7	30	18	383	61	230	46	350	145	143	265	27	39
8	34	18	380	94	200	46	360	149	729	232	33	37
9	37	19	333	205	180	46	370	215	1100	215	32	33
10	42	19	294	268	160	50	370	255	1040	210	29	32
11	41	22	260	281	150	60	360	258	884	192	28	29
12	40	22	225	265	140	135	340	245	754	171	28	27
13	40	22	209	245	130	255	300	200	680	151	25	26
14	37	22	284	223	120	750	270	228	589	139	19	25
15	36	22	452	198	110	1180	235	265	510	118	28	22
16	34	23	494	181	100	1220	210	252	450	100	19	21
17	33	26	470	168	92	1060	192	268	378	87	19	21
18	33	26	416	154	85	821	183	453	322	78	17	21
19	32	27	359	137	80	650	183	540	328	71	15	20
20	31	28	316	135	75	541	195	558	325	57	14	19
21	30	33	276	128	70	500	240	522	315	57	12	17
22	28	36	240	120	65	450	265	471	285	43	12	15
23	27	38	216	120	60	400	262	429	250	42	12	13
24	25	37	194	110	60	361	260	405	222	38	9.5	10
25	23	36	170	110	55	361	260	375	198	38	10	9.5
26	22	32	150	200	55	540	258	345	198	36	8.7	7.3
27	22	33	135	480	50	600	245	310	320	34	8.0	7.3
28	20	33	121	500	50	820	232	280	441	31	10	5.9
29	18	32	107	480	---	541	215	252	489	22	12	4.7
30	17	37	97	460	---	480	195	230	477	15	14	4.7
31	17	---	89	440	---	420	---	210	---	17	22	---
TOTAL	924	757	7417	6183	4287	12621	8401	8794	12445	4551	558.2	676.4
MEAN	29.8	25.2	239	199	153	407	280	284	415	147	18.0	22.5
MAX	42	38	494	500	410	1220	370	558	1100	423	33	43
MIN	17	15	49	61	50	46	183	145	143	15	8.0	4.7

CAL YR 1977 TOTAL 40261.4 MEAN 110 MAX 1050 MIN 9.6
WTR YR 1978 TOTAL 67614.6 MEAN 185 MAX 1220 MIN 4.7

03143500 WILLS CREEK BELOW WILLS CREEK DAM, AT WILLS CREEK, OH

LOCATION.--Lat 40°09'38", long 81°50'51", in sec. 22, T.4 N., R.6 W., Coshocton County, Hydrologic Unit 05040005, on left bank 1,200 ft (366 m) downstream from Wills Creek Dam, 1.3 mi (2.1 km) southeast of town of Wills Creek, 2.7 mi (4.3 km) southeast of Conesville, and 6.2 mi (10.0 km) upstream from mouth.

DRAINAGE AREA.--842 mi² (2,181 km²).

PERIOD OF RECORD.--October 1938 to current year. Prior to October 1939, published as Wills Creek at Wills Creek.

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 717.00 ft (218.582 m) National Geodetic Vertical Datum of 1912. Prior to Feb. 18, 1939, nonrecording gage and Feb. 18, 1939, to Sept. 30, 1949, water-stage recorder, at site 1,500 ft (457 m) downstream at same datum.

REMARKS.--Records good. Flow regulated by Senecaville Lake on Seneca Fork, 80 mi (129 km) upstream, Salt Fork Reservoir, 43 mi (69 km) upstream, and Wills Creek Lake, 0.2 mi (0.3 km) upstream (see stations 03141000, 03142290, and 03143000). Water-quality data collected at this site 1957, 1965 to 1977.

AVERAGE DISCHARGE.--40 years, 908 ft³/s (25.71 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,930 ft³/s (196 m³/s) Mar. 7, 1940, gage height, 17.40 ft (5.304 m); maximum gage height, 17.50 ft (5.334 m) Mar. 22, 1964 (backwater from Muskingum River); minimum daily discharge, 1.0 ft³/s (0.028 m³/s) Aug. 10, Oct. 27-29, 1948, Jan. 28, 1952, July 6-9, 1969, Apr. 3, 1970, Feb. 25, 1975, Feb. 19, 1976, when gates at Wills Creek Lake were closed.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a discharge of 22,300 ft³/s (632 m³/s), computed by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,430 ft³/s (154 m³/s) Mar. 12, gage height, 15.68 ft (4.779 m); minimum daily, 50 ft³/s (1.42 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	145	102	841	504	387	284	5070	936	616	2260	136	444
2	232	101	1370	466	411	290	4860	781	605	1720	127	462
3	289	99	1660	436	1260	302	4900	693	663	1630	123	421
4	333	96	1450	399	2520	339	5060	686	783	2008	127	402
5	315	94	1500	374	3170	423	5050	644	761	2000	130	339
6	303	94	3070	358	3980	367	4890	966	655	1900	159	314
7	295	106	3680	345	3600	302	4430	998	579	1480	196	278
8	280	138	3780	385	4350	268	3240	857	2320	1000	257	226
9	291	207	3600	1730	3380	253	2850	1300	4370	798	314	183
10	329	300	2710	2600	1560	258	2370	2600	4670	855	322	151
11	392	454	1950	2400	1130	310	2000	2190	4490	868	310	128
12	424	650	1600	2200	808	555	1730	1750	3940	725	284	116
13	373	702	1480	1970	637	1460	1530	1400	2720	618	259	108
14	327	603	2040	1610	510	2220	1320	1630	1970	548	221	102
15	301	502	3610	1780	460	902	971	2150	1680	488	187	101
16	285	414	4130	1500	434	1350	804	2388	1330	419	165	96
17	256	442	4180	1400	412	2800	728	2198	1030	363	147	90
18	220	577	3570	1200	420	4150	670	2150	881	328	132	83
19	198	765	2610	1000	480	4520	865	2370	990	380	120	79
20	200	853	2260	860	480	4700	1110	2570	1000	273	131	76
21	229	892	2210	740	470	4730	1440	2580	1460	246	125	76
22	219	950	2170	680	420	4280	1890	2230	1340	228	113	75
23	203	879	2060	640	380	5190	2160	1620	1060	219	102	72
24	182	793	1880	540	317	5250	1980	1630	930	226	94	69
25	164	741	1660	550	298	4660	1750	1600	798	217	88	67
26	151	689	1520	1300	289	4690	1640	1560	672	200	81	63
27	138	649	1400	2650	286	2800	1540	1350	804	185	75	60
28	125	618	1170	3270	299	2500	1420	1080	1260	174	77	58
29	113	593	946	800	---	4050	1310	826	1930	160	87	53
30	106	601	751	400	---	4880	1180	701	2310	151	111	50
31	103	---	575	613	---	5110	---	649	---	144	273	---
TOTAL	7512	14698	67433	36220	32198	73403	70648	45797	48817	22723	5075	4844
MEAN	242	490	2175	1168	1149	2368	2357	1510	1621	733	164	161
MAX	424	950	4180	3270	4350	5250	5070	2588	4670	2260	322	462
MIN	103	94	575	345	286	253	670	649	579	144	75	50

CAL YR 1977 TOTAL 295398 MEAN 809 MAX 5280 MIN 64
WTR YR 1978 TOTAL 430186 MEAN 1179 MAX 5250 MIN 50

03146000 WAKATOMIKA CREEK NEAR FRAZEYSBURG, OH

LOCATION.--Lat 40°07'57", long 82°08'53", in NW 1/4 sec. 13, T.3 N., R.9 W., Muskingum County, Hydrologic Unit 05040004, on right bank 2.0 mi (3.2 km) northwest of Frazeysburg, 2.0 mi (3.2 km) downstream from Fivemile Run, and 2.5 mi (4.0 km) upstream from Black Run.

DRAINAGE AREA.--140 mi² (363 km²).

PERIOD OF RECORD.--September 1936 to current year.

REVISED RECORDS.--WSP 1113: 1937(M). WSP 1555: 1952(M).

GAGE.--Water-stage recorder. Datum of gage is 748.12 ft (228.027 m) National Geodetic Vertical Datum of 1912. Prior to Oct. 31, 1936, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1970 to 1974.

AVERAGE DISCHARGE.--42 years, 148 ft³/s (4.191 m³/s), 14.36 in/yr (365 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,700 ft³/s (388 m³/s) Jan. 22, 1959, gage height, 13.15 ft (4.008 m), from rating curve extended above 7,700 ft³/s (218 m³/s) on basis of contracted-opening measurement of peak flow; minimum, 2.0 ft³/s (0.057 m³/s) Oct. 3, 1963, gage height, 0.94 ft (0.287 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,600 ft³/s (45.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 2	0145	1770	50.1	5.65	1.722	Mar. 15	0200	*5530	157	*9.55	2.911
Dec. 6	0600	2200	62.3	6.29	1.917	Mar. 27	1215	2140	60.6	6.14	1.871
Dec. 15	0315	3960	112	8.49	2.588						

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	451	27	901	88	240	54	278	164	102	38	18	442
2	657	27	549	84	170	54	223	144	94	42	16	170
3	141	27	312	86	130	52	233	127	86	114	16	116
4	88	27	258	76	100	52	247	132	76	94	28	114
5	68	27	814	76	92	52	240	285	69	64	16	88
6	65	27	1490	72	86	52	334	214	63	53	159	65
7	59	30	487	82	80	52	595	172	123	47	159	56
8	80	31	275	733	78	50	412	189	334	42	71	58
9	172	29	233	1040	74	50	316	653	141	39	47	44
10	154	37	175	500	72	50	275	400	91	39	43	39
11	104	44	223	350	70	120	258	302	73	35	34	37
12	85	34	268	260	68	349	230	278	64	29	30	35
13	69	29	156	229	66	869	184	510	63	27	31	34
14	62	26	1670	200	64	2750	151	865	58	27	25	36
15	56	26	2210	180	62	3340	132	644	51	26	22	89
16	52	33	669	160	60	1070	121	460	48	25	21	58
17	49	162	438	150	60	786	112	356	47	22	22	55
18	46	125	337	140	58	529	129	323	46	20	19	43
19	44	82	251	130	58	460	759	268	118	18	30	36
20	42	67	278	120	58	473	628	223	71	17	208	33
21	37	95	258	120	56	636	655	204	110	19	63	29
22	34	139	198	110	56	579	501	172	65	52	48	27
23	34	110	167	110	56	412	368	172	53	34	38	24
24	31	92	156	110	54	337	337	334	48	44	34	22
25	30	79	204	208	54	376	323	271	44	33	37	21
26	31	77	141	968	54	925	488	198	49	27	33	20
27	33	65	130	992	54	1660	323	167	60	22	37	19
28	31	62	120	669	54	841	258	144	89	20	125	18
29	30	55	110	600	---	549	217	132	57	18	88	17
30	29	134	100	450	---	379	189	125	44	18	118	18
31	27	---	90	330	---	319	---	121	---	19	673	---
TOTAL	2891	1824	13668	9610	2184	18277	9446	8814	2437	1124	2301	1839
MEAN	93.3	60.8	441	310	78.0	590	315	284	81.2	36.3	74.2	61.3
MAX	657	162	2210	1040	240	3340	759	865	334	114	673	442
MIN	27	26	90	72	54	50	112	121	44	17	16	17
CFSM	.67	.43	3.15	2.21	.56	4.21	2.25	2.03	.58	.26	.53	.44
IN.	.77	.48	3.63	2.55	.58	4.86	2.51	2.34	.65	.30	.61	.49

CAL YR 1977 TOTAL 51240.0 MEAN 140 MAX 2210 MIN 7.8 CFSM 1.00 IN 13.62
WTR YR 1978 TOTAL 74415.0 MEAN 204 MAX 3340 MIN 16 CFSM 1.46 IN 19.77

Minimum discharge, 14 ft³/s (0.40 m³/s) Aug. 5.

03144500 MUSKINGUM RIVER AT DRESDEN, OH

LOCATION.--Lat 40°07'13", long 81°59'59", Muskingum County, Hydrologic Unit 05040004, on left bank 70 ft (21 m) downstream from bridge on State Highway 208, 0.5 mi (0.8 km) east of Dresden, and 0.5 mi (0.8 km) downstream from Wakatomika Creek.

DRAINAGE AREA.--5,993 mi² (15,522 km²).

PERIOD OF RECORD.--September 1921 to current year.

REVISED RECORDS.--WSP 728: 1927(M). WSP 803: 1935. WSP 1385: 1922-23, 1928(M), 1929, 1930(M). WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 693.15 ft (211.272 m) National Geodetic Vertical Datum of 1912. Prior to Aug. 24, 1925, nonrecording gage at about same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by 16 flood-control reservoirs at points 15 mi (24 km) to 105 mi (169 km) upstream. Water-quality data collected at this site 1966, 1969 to 1977; Water temperatures collected 1952-61, 1963 to 1974; Sediment data collected 1952 to 1974.

AVERAGE DISCHARGE.--57 years, 6,206 ft³/s (175.8 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 100,000 ft³/s (2,830 m³/s) Aug. 9, 1935, gage height, 31.6 ft (9.63 m); minimum daily, 335 ft³/s (9.49 m³/s) June 25, 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 46.0 ft (14.02 m), present site and datum, from floodmark, discharge, 228,000 ft³/s (6,460 m³/s), computed by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 28,300 ft³/s (801 m³/s) Mar. 27, gage height, 17.18 ft (5.236 m); maximum gage height, about 19.6 ft (5.974 m) ice jam; minimum daily, 1,220 ft³/s (34.6 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3290	2050	8970	8480	11000	3320	26200	8040	7670	7500	1960	4380
2	10200	2020	15000	7850	10000	3380	25300	7400	7140	6310	1880	4160
3	8000	2000	15400	7190	9500	3560	24400	7060	6430	6690	1820	3360
4	6800	1990	13200	6290	10500	3400	24400	6640	6050	9510	1860	3000
5	5600	1950	12600	5580	10700	3240	24700	7300	5540	8650	2130	2530
6	4590	2020	20700	5330	10000	3110	24500	7690	4990	7400	2510	2250
7	4140	2060	21700	5040	9500	3000	25400	7380	4620	6180	3050	2060
8	4120	2340	19400	7010	9000	2930	24100	6620	7950	5210	3820	1890
9	4890	2650	17700	15200	7000	2870	22700	8810	12300	4620	4120	1740
10	6940	3030	14600	17200	6000	2960	20700	11500	15000	4400	3680	1630
11	7160	3420	12200	14300	5500	3400	19800	11800	14100	4120	5670	1560
12	5910	4180	10300	13200	5000	4920	18100	10100	12600	3740	6960	1510
13	4960	4140	9490	12200	4800	9510	15700	9380	10700	3620	5710	1610
14	4410	3600	14700	11500	4600	19400	14500	13500	9120	3180	3960	1850
15	4090	3310	25100	10100	4500	25300	11100	16000	7540	3860	3370	2670
16	3860	3330	27000	9180	4300	22500	9350	16100	6820	4380	2960	2830
17	3640	4640	26900	7280	4100	23700	8540	15300	6220	3940	2560	2730
18	3550	7650	25200	6080	3900	25700	8040	15600	5560	3400	2330	2730
19	3460	8710	22900	5580	3800	26200	9580	16600	6470	3150	2180	2210
20	3390	7480	22400	5380	3700	25400	13000	16600	10500	2930	2670	1950
21	3290	6510	23000	5100	3600	26100	15400	15400	10300	2670	2180	1780
22	3170	7080	22600	5000	3500	24900	16900	13400	8460	2500	1930	1650
23	3010	7500	21800	5000	3400	25700	16600	11600	6720	2370	1790	1560
24	2830	6760	20800	5000	3300	26300	15100	11300	5600	2480	1680	1510
25	2690	5990	18500	5200	3200	25700	13900	13600	4900	3810	1620	1430
26	2610	5470	16900	9360	3200	26900	13500	14300	4590	2880	1560	1360
27	2530	5100	15700	15800	3200	27500	12500	12600	5670	2450	1540	1320
28	2450	4780	14600	15000	3250	26600	11100	10300	9580	2240	1660	1280
29	2380	4470	13800	14000	---	26900	9850	8780	10600	2130	1740	1260
30	2240	4520	13200	13800	---	27300	8860	7810	8820	2090	1790	1220
31	2120	---	10200	12000	---	27000	---	7220	---	2020	3480	---
TOTAL	132320	130800	547260	284210	164030	508700	503820	346330	242560	129420	86170	63030
MEAN	4268	4360	17650	9160	5859	16410	16790	11170	8085	4175	2780	2101
MAX	10200	8710	27000	17200	11000	27500	26200	16600	15000	9510	6960	4380
MIN	2120	1950	8970	5000	3200	2870	8040	6620	4590	2020	1540	1220

CAL YR 1977 TOTAL 2371180 MEAN 6496 MAX 27000 MIN 1060
WTR YR 1978 TOTAL 3138670 MEAN 8599 MAX 27500 MIN 1220

03145000 SOUTH FORK LICKING RIVER NEAR HEBRON, OH

LOCATION.--Lat 39°59'19", long 82°28'30", in NW 1/4 sec. 3, T.1 N., R.12 W., Licking County, Hydrologic Unit 05040006, on left bank at upstream side of bridge on county road, 800 ft (244 m) downstream from Beaver Run, 2.3 mi (3.7 km) north of Hebron, and 2.5 mi (4.0 km) upstream from Ramp Creek.

DRAINAGE AREA.--133 mi² (344 km²).

PERIOD OF RECORD.--October 1939 to September 1948, July 1968 to current year.

REVISED RECORDS.--WSP 923: 1940. WSP 1033: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 856.08 ft (260.933 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 13, 1974 nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods or no gage height record, which are fair. Occasional regulation by Buckeye Lake, capacity, 27,300 acre-ft (33.7 hm³), on unnamed tributary 5.6 mi (9.0 km) upstream from station. Occasional diversion from Buckeye Lake into Jonathan Creek which bypasses station. Water-quality data collected at this site 1969 to 1977.

AVERAGE DISCHARGE.--19 years, 145 ft³/s (4.106 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,120 ft³/s (117 m³/s) Mar. 6, 1945, gage height, 12.1 ft (3.69 m), from flood marks; no flow Aug. 22, 1942.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959, reached a stage of 12.4 ft (3.78 m) present datum, from floodmarks; discharge 5,880 ft³/s (167 m³/s), by slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,230 ft³/s (63.2 m³/s) Mar. 15, gage height, 10.34 ft (3.152 m); minimum daily, 8.9 ft³/s (0.252 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	138	20	1250	72	222	25	132	88	72	39	20	1070
2	347	18	962	68	150	24	112	80	60	40	18	467
3	113	18	627	64	120	24	113	74	55	190	21	341
4	66	21	633	62	90	24	123	111	52	96	20	307
5	47	48	911	61	78	23	127	423	49	68	18	280
6	51	96	1370	64	68	23	194	335	44	56	360	263
7	80	106	700	90	62	23	360	275	83	46	276	253
8	147	117	350	884	56	24	185	297	999	40	199	158
9	312	112	180	916	52	25	130	881	1200	37	273	28
10	176	113	110	360	48	28	116	457	980	35	386	25
11	95	117	94	290	44	68	116	305	720	32	318	31
12	67	108	88	260	40	248	146	320	600	30	459	25
13	52	100	84	230	38	753	106	799	400	29	421	28
14	44	97	700	210	36	1400	91	1050	129	28	259	23
15	39	100	1310	180	34	1820	81	711	71	27	53	25
16	35	108	877	170	33	1920	74	444	63	28	35	22
17	32	287	436	160	32	1090	70	203	60	28	30	23
18	31	197	349	150	30	607	89	176	69	27	23	21
19	34	112	306	140	29	546	798	151	635	24	19	19
20	31	94	357	130	29	585	540	117	588	23	18	16
21	26	368	394	120	28	771	517	103	536	21	26	15
22	25	610	338	120	27	714	434	94	478	20	21	15
23	23	440	285	110	27	487	320	89	457	20	16	15
24	21	405	126	109	26	338	305	109	385	27	16	12
25	21	402	189	133	26	323	381	117	59	41	15	12
26	22	454	127	644	25	1100	582	91	84	35	12	12
27	23	435	109	657	25	1210	325	79	76	26	265	11
28	26	422	109	568	25	683	246	71	73	22	649	9.7
29	25	416	85	419	---	512	110	67	59	20	312	8.9
30	23	565	78	317	---	436	98	70	42	21	442	10
31	22	---	75	261	---	299	---	110	---	23	1150	---
TOTAL	2194	6506	13609	8019	1500	16153	7021	8297	9178	1199	6150	3545.6
MEAN	70.8	217	439	259	53.6	521	234	268	306	38.7	198	118
MAX	347	610	1370	916	222	1920	798	1050	1200	190	1150	1070
MIN	21	18	75	61	25	23	70	67	42	20	12	8.9

CAL YR 1977 TOTAL 49464.0 MEAN 136 MAX 1370 MIN 8.1
WTR YR 1978 TOTAL 83371.6 MEAN 228 MAX 1920 MIN 8.9

03146000 NORTH FORK LICKING RIVER AT UTICA, OH

LOCATION.--Lat 40°13'41", long 82°27'06", in T.4 N., R.12 W., Licking County, Hydrologic Unit 05040006, on left bank at upstream side of bridge on State Highway 13 at south edge of Utica, 0.2 mi (0.3 km) downstream from unnamed right bank tributary, and 2.0 mi (3.2 km) upstream from Lake Fork.

DRAINAGE AREA.--116 mi² (300 km²).

PERIOD OF RECORD.--October 1939 to September 1948, October 1969 to current year.

REVISED RECORDS.--WRD Ohio 1970: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 934 ft (285 m) from topographic map. Prior to September 30, 1948, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Water-quality data collected at this site 1969 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--18 years, 133 ft³/s (3.767 m³/s), 15.57 in/yr (395 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,040 ft³/s (199 m³/s) June 18, 1973, gage height, 13.04 ft (3.975 m); minimum observed, 0.6 ft³/s (0.017 m³/s) Aug. 13, Oct. 2, 1944.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959 reached a stage of 15.8 ft (4.82 m), from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft³/s (70.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 1	2130	5340	151	11.37	3.466	Mar. 14	2330	5480	155	11.51	3.508
Dec. 14	1930	*5850	166	*11.84	3.609	Mar. 27	0530	2770	78.4	8.60	2.621

Minimum discharge, 3.0 ft³/s (0.085 m³/s) Sept. 23, 25-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2010	16	1640	54	160	44	175	67	57	23	7.4	53
2	1690	15	553	50	140	43	133	59	49	25	6.6	28
3	400	14	288	46	120	44	189	54	44	210	7.7	17
4	204	14	262	44	100	43	236	56	39	184	7.6	12
5	124	14	817	43	90	38	236	103	35	83	8.2	9.3
6	97	14	1040	44	80	38	486	90	31	55	11	7.6
7	94	16	314	54	72	37	830	74	32	41	13	6.5
8	164	16	207	1240	66	37	308	76	54	37	11	5.6
9	442	17	153	809	62	38	188	241	147	30	9.0	5.1
10	246	16	118	272	56	43	145	144	66	25	7.9	4.9
11	139	15	127	150	54	53	141	95	43	22	7.0	4.9
12	99	15	108	120	50	145	155	85	35	19	7.6	4.8
13	75	14	129	100	48	535	111	787	42	18	7.7	4.9
14	60	13	3070	86	46	2900	87	617	39	19	6.3	5.1
15	53	12	2090	76	44	3170	74	366	32	17	6.0	6.4
16	46	14	635	70	42	1320	66	248	27	15	6.1	6.4
17	39	64	416	64	42	830	61	218	24	13	6.4	6.1
18	36	101	299	62	40	496	73	391	64	12	5.5	6.0
19	33	62	234	60	39	476	691	236	1520	11	6.8	5.5
20	31	45	251	60	38	642	437	147	411	10	10	5.5
21	28	357	234	58	37	1180	491	116	280	13	6.7	5.6
22	25	345	151	58	36	813	293	90	233	19	5.6	4.1
23	24	173	122	56	36	542	190	86	112	11	5.1	3.3
24	22	127	120	58	35	400	186	921	75	13	5.0	3.5
25	20	99	366	92	35	419	176	428	57	12	8.4	3.4
26	20	94	155	705	35	1640	276	205	48	11	6.3	3.0
27	20	72	109	874	35	1830	157	130	43	9.6	16	3.1
28	20	63	84	600	35	600	112	96	37	8.5	55	3.0
29	18	53	71	400	---	363	91	76	30	7.7	25	3.0
30	18	391	63	280	---	241	78	66	26	7.7	19	4.1
31	17	---	56	210	---	202	---	71	---	7.7	69	---
TOTAL	6314	2281	14282	6902	1673	19202	6857	6439	3732	989.2	379.9	240.7
MEAN	204	76.0	461	223	59.8	619	229	208	124	31.9	12.3	8.02
MAX	2010	391	3070	1240	160	3170	830	921	1520	210	69	53
MIN	17	12	56	43	35	37	61	54	24	7.7	5.0	3.0
CFSM	1.76	.66	3.97	1.92	.52	5.34	1.97	1.79	1.07	.28	.11	.07
IN.	2.02	.73	4.58	2.21	.54	6.16	2.20	2.06	1.20	.32	.12	.08

CAL YR 1977 TOTAL 52613.8 MEAN 144 MAX 3070 MIN 1.8 CFSM 1.24 IN 16.87
WTR YR 1978 TOTAL 69301.8 MEAN 190 MAX 3170 MIN 3.0 CFSM 1.64 IN 22.22

03146500 LICKING RIVER NEAR NEWARK, OH

LOCATION.--Lat 40°03'33", long 82°20'23", in SW 1/4 T.2 N., R.11 W., Licking County, Hydrologic Unit 05040006, on right bank at downstream side of Stadden Bridge, 1.0 mi (1.6 km) downstream from Shawnee Run, 1.5 mi (2.4 km) upstream from Equality Run, and 3.5 mi (5.6 km) east of Newark.

DRAINAGE AREA.--537 mi² (1,391 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year.

REVISED RECORDS.--WSP 973: 1940(M). WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 779.02 ft (237.485 m) National Geodetic Vertical Datum of 1929. Prior to May 9, 1940, nonrecording gage at same site and datum.

REMARKS.--Records good. Occasional regulation by Buckeye Lake, capacity, 27,300 acre-ft (33.7 hm³), on South Fork 15.2 mi (24.5 km) upstream.

AVERAGE DISCHARGE.--39 years, 566 ft³/s (16.03 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 45,000 ft³/s (1,270 m³/s) Jan. 21, 1959, gage height, 20.3 ft (6.19 m) (from high-water mark), from rating curve extended above 24,000 ft³/s (680 m³/s) on basis of flood-routing studies from station at Toboso; minimum daily, 28 ft³/s (0.79 m³/s) Sept. 27, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 6,500 ft³/s (184 m³/s) and maximum (*).

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 2	0700	6780	192	10.21	3.112	Mar. 15	0230	*12000	340	*13.46	4.103
Dec. 15	0300	9940	282	12.32	3.775	Mar. 27	0900	6960	197	10.34	3.152

Minimum daily discharge, 76 ft³/s (2.15 m³/s) Aug. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1780	137	4760	347	662	201	827	472	381	216	106	2530
2	4860	134	2400	340	576	187	705	429	326	220	103	1270
3	1040	132	1370	297	504	201	696	396	301	476	106	817
4	634	134	1330	285	452	198	816	425	285	537	108	656
5	472	134	2540	2[illegible]	425	177	827	1020	263	378	99	558
6	422	132	4520	286	396	184	866	864	247	304	563	504
7	414	140	1760	326	371	180	1990	701	281	255	460	456
8	559	143	1170	3150	350	180	1220	672	1520	227	320	406
9	1090	143	1030	3580	330	187	832	1980	2290	209	350	236
10	740	143	868	1400	317	201	705	1340	1170	191	403	212
11	480	140	821	1100	304	239	658	843	750	180	418	210
12	378	134	710	880	297	546	720	745	616	167	630	196
13	320	129	521	720	285	1520	621	2060	567	158	691	186
14	285	126	5890	620	285	7030	533	3090	500	155	418	234
15	255	126	7760	580	255	10200	472	2000	313	149	304	225
16	231	143	2660	520	259	5910	433	1330	276	146	139	207
17	212	468	1520	480	247	3520	403	969	251	152	129	207
18	198	472	1150	460	239	2040	422	1000	247	140	108	186
19	191	313	952	440	227	1720	2230	913	2240	132	104	167
20	187	263	963	410	223	1980	1850	677	1560	126	150	158
21	177	525	1030	390	223	2800	1710	581	1030	121	117	149
22	167	1270	816	370	209	2920	1430	504	869	121	102	142
23	164	796	715	360	194	1890	1020	460	720	129	90	137
24	158	686	550	350	205	1520	935	1020	634	152	82	130
25	155	616	827	441	201	1310	1020	1140	367	137	80	128
26	155	648	648	2070	198	4750	1760	686	333	146	76	120
27	152	612	488	2030	191	6140	1040	529	550	129	2340	122
28	152	581	403	1760	194	2730	806	444	353	118	3050	114
29	149	554	381	1360	---	1710	607	396	297	108	1660	113
30	143	853	357	1020	---	1310	525	367	243	106	2070	128
31	140	---	343	790	---	1100	---	496	---	108	4630	---
TOTAL	16480	10827	51265	27449	8619	64781	28699	28549	19785	5893	20006	10904
MEAN	532	361	1654	885	308	2090	957	921	660	190	645	363
MAX	4860	1270	7760	3580	662	10200	2230	3090	2290	537	4630	2530
MIN	140	126	343	285	191	177	403	367	243	106	76	113

CAL YR 1977 TOTAL 196781 MEAN 539 MAX 7760 MIN 56
WTR YR 1978 TOTAL 293257 MEAN 803 MAX 10200 MIN 76

03146500 LICKING RIVER NEAR NEWARK, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1962 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1968 to current year.
pH: July 1968 to current year.
WATER TEMPERATURES: June 1962 to current year.
DISSOLVED OXYGEN: July 1968 to current year.

INSTRUMENTATION.--Water quality monitor since July 1968. Temperature recorder June 1962 to July 1968.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. Dissolved oxygen concentrations listed as 15.0 mg/L represent concentrations of 15.0 mg/L or higher due to instrument limitations prior to February 28, 1978; 20.0 mg/L limitation thereafter.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,650 micromhos Feb. 4, 1971; minimum recorded, 100 micromhos Aug. 18, 1969.
pH: Maximum, 10.2 units Mar. 8, 1978; minimum, 6.5 units May 24, 1970.
WATER TEMPERATURES: Maximum, 31.5°C July 14, 15, 1972; minimum, 0.0°C on many days during winter periods.
DISSOLVED OXYGEN: Maximum, 15.2 mg/L Mar. 9, 11, 1978; minimum, 0.0 mg/L Sept. 1, 1970.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,280 micromhos July 24; minimum, 138 micromhos Apr. 26.
pH: Maximum, 8.4 units Nov. 26-29, Apr. 17; minimum, 7.4 units Feb. 18, 19, 22, 28, July 24, Aug. 6, 7.
WATER TEMPERATURES: Maximum, 28.5°C July 22; minimum, 0.0°C Dec. 8-10.
DISSOLVED OXYGEN: Maximum recorded, 15.2 mg/L Mar. 9, 11; minimum recorded, 3.4 mg/L July 24.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	780	210	753	741	399	312	744	681	528	516	750	711
2	351	207	759	747	420	336	693	669	555	525	759	714
3	468	357	762	750	462	423	705	678	576	552	810	714
4	549	474	765	747	468	453	735	681	600	579	828	732
5	594	558	771	753	462	300	---	---	612	591	756	726
6	606	576	771	747	354	276	---	---	618	603	759	726
7	630	606	753	729	441	357	---	---	630	615	759	726
8	639	510	759	738	474	444	---	---	---	---	783	735
9	528	465	771	756	501	474	---	---	672	642	945	729
10	525	465	783	762	507	501	---	---	678	642	897	756
11	570	522	810	786	510	507	---	---	669	645	801	732
12	621	576	819	783	585	516	---	---	690	648	750	525
13	660	630	864	783	849	591	---	---	717	666	516	333
14	684	660	819	780	600	213	---	---	720	672	327	174
15	693	672	798	783	339	213	---	---	732	684	219	171
16	714	696	798	693	414	348	---	---	738	684	276	219
17	753	705	696	462	471	417	---	---	720	684	348	276
18	720	711	585	534	501	471	---	---	726	684	411	351
19	726	717	624	588	531	504	---	---	738	681	426	411
20	729	720	642	591	531	507	---	---	747	675	420	366
21	735	711	615	465	507	504	---	---	735	675	360	267
22	735	723	492	414	528	507	---	---	720	684	357	264
23	735	726	486	444	546	528	---	---	750	699	393	357
24	732	726	507	489	630	552	---	---	735	699	438	396
25	744	732	510	504	639	504	---	---	723	708	462	396
26	747	735	498	489	546	498	---	---	792	708	381	261
27	750	738	498	492	594	546	---	---	825	708	309	252
28	747	738	528	498	639	591	---	---	735	708	393	315
29	750	735	516	501	666	630	---	---	---	---	438	399
30	747	729	525	402	663	651	---	---	---	---	471	438
31	744	735	---	---	669	660	---	---	---	---	510	468
MONTH	780	207	864	402	849	213	744	669	825	516	945	171

03146500 LICKING RIVER NEAR NEWARK, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	573	516	639	585	651	618	837	720	846	795	420	321
2	582	552	681	594	666	645	792	726	834	795	510	426
3	609	563	618	597	780	669	750	354	825	699	561	501
4	543	534	630	495	708	690	570	510	789	705	648	537
5	534	519	510	435	717	696	621	561	825	783	570	558
6	555	441	489	465	726	702	660	621	795	270	600	567
7	435	366	507	492	762	441	714	660	612	381	675	573
8	474	393	564	438	450	297	939	690	618	555	654	573
9	522	477	405	339	399	321	801	696	570	501	810	666
10	564	531	447	366	477	405	777	717	552	420	957	765
11	567	549	489	450	501	480	777	723	495	468	837	780
12	555	543	510	471	510	501	744	729	498	291	903	783
13	567	552	489	276	519	507	798	735	471	408	864	798
14	594	567	360	273	597	519	984	741	531	474	864	642
15	600	588	417	363	675	615	870	750	696	513	759	603
16	624	597	468	417	693	678	915	759	762	702	894	690
17	648	603	555	471	732	693	948	732	786	741	936	750
18	669	552	507	459	750	666	843	744	1040	771	831	798
19	477	318	534	465	576	288	1030	756	945	687	1100	798
20	408	330	564	519	420	330	960	753	804	672	822	807
21	417	402	582	552	453	408	888	762	798	765	873	816
22	471	405	594	582	513	438	894	750	855	777	867	828
23	495	450	609	597	522	447	915	663	888	810	978	837
24	501	480	621	309	507	462	1280	630	1020	846	945	840
25	513	384	486	348	714	516	768	744	849	822	963	837
26	426	138	543	486	699	465	765	738	978	840	921	840
27	471	426	579	546	615	447	774	759	855	213	954	837
28	522	474	615	582	648	612	783	765	339	249	858	837
29	576	507	627	609	717	648	810	786	411	306	930	843
30	621	567	666	627	750	696	813	792	393	285	1040	753
31	---	---	612	480	---	---	822	795	315	267	---	---
MONTH	669	138	681	273	780	288	1280	354	1040	213	1100	321
YEAR	1280	138										

03146500 LICKING RIVER NEAR NEWARK, OH--Continued

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.9	7.6	8.0	7.8	7.8	7.7	8.0	7.9	7.7	7.6	7.8	7.6
2	7.8	7.7	8.0	7.8	7.8	7.8	8.0	7.9	7.6	7.5	7.8	7.6
3	7.9	7.8	8.0	7.7	8.0	7.9	8.0	8.0	7.6	7.5	7.8	7.6
4	7.9	7.9	7.9	7.7	8.0	8.0	8.1	8.0	7.6	7.5	7.9	7.7
5	7.9	7.9	8.0	7.7	8.0	7.8	---	---	7.6	7.5	7.9	7.6
6	8.0	7.6	8.0	7.7	7.8	7.6	---	---	7.6	7.6	7.9	7.7
7	8.1	8.0	7.9	7.7	7.7	7.6	---	---	7.6	7.5	8.0	7.7
8	8.0	7.9	7.9	7.7	7.9	7.6	---	---	---	---	7.9	7.7
9	8.0	7.9	8.0	7.7	8.0	7.8	---	---	7.7	7.5	8.1	7.8
10	8.0	8.0	7.9	7.8	8.0	7.8	---	---	7.6	7.5	8.1	7.8
11	8.1	8.0	8.1	7.9	8.1	8.0	---	---	7.6	7.5	8.2	7.8
12	8.1	8.1	8.1	7.9	8.1	8.0	---	---	7.6	7.5	8.0	7.7
13	8.1	8.0	8.1	7.9	8.1	8.0	---	---	7.6	7.5	7.8	7.6
14	8.1	8.0	8.0	7.9	8.1	7.8	---	---	7.6	7.5	7.9	7.7
15	8.1	8.0	7.9	7.8	8.0	7.8	---	---	7.6	7.5	7.9	7.7
16	8.1	8.0	7.9	7.7	7.8	7.7	---	---	7.6	7.5	7.7	7.5
17	8.1	8.0	7.9	7.7	7.8	7.6	---	---	7.6	7.5	7.6	7.6
18	8.0	7.9	8.0	7.8	7.9	7.6	---	---	7.6	7.4	7.8	7.6
19	8.0	7.9	8.0	7.9	7.9	7.9	---	---	7.7	7.4	7.8	7.7
20	8.0	7.9	7.9	7.8	8.0	7.9	---	---	7.7	7.5	7.8	7.7
21	8.0	7.9	8.0	7.8	8.0	7.9	---	---	7.6	7.5	7.8	7.8
22	8.0	7.9	7.9	7.9	8.0	7.9	---	---	7.6	7.4	7.8	7.7
23	8.0	7.9	8.1	7.9	8.0	8.0	---	---	7.6	7.5	7.8	7.8
24	8.0	7.9	8.2	8.0	8.0	8.0	---	---	7.6	7.5	7.8	7.8
25	8.0	7.8	8.3	8.1	8.1	8.0	---	---	7.6	7.5	7.8	7.7
26	8.0	7.8	8.4	8.2	8.0	7.9	---	---	7.6	7.5	7.8	7.8
27	8.0	7.8	8.4	8.3	8.0	7.9	---	---	7.6	7.5	7.9	7.8
28	8.0	7.8	8.4	8.2	8.0	8.0	---	---	7.7	7.4	7.8	7.7
29	8.1	7.9	8.4	8.2	8.0	7.9	---	---	---	---	7.9	7.8
30	8.1	7.8	8.2	7.8	8.0	8.0	---	---	---	---	7.9	7.8
31	8.1	7.8	---	---	8.0	8.0	---	---	---	---	7.9	7.8
MONTH	8.1	7.6	8.4	7.7	8.1	7.6	8.1	7.9	7.7	7.4	8.2	7.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.0	7.9	8.3	8.0	8.1	7.9	8.2	8.1	8.0	7.7	7.6	7.6
2	8.0	7.9	8.2	7.9	8.2	7.9	8.1	8.0	8.0	7.7	7.7	7.6
3	7.9	7.9	8.2	7.8	8.2	8.0	8.2	7.8	7.9	7.5	7.7	7.6
4	8.0	7.9	8.1	7.8	8.2	8.0	8.2	8.1	8.0	7.5	7.8	7.7
5	8.1	8.0	7.9	7.8	8.3	8.0	8.2	8.1	7.9	7.6	7.8	7.7
6	8.0	7.9	8.1	7.8	8.3	8.0	8.1	7.8	7.8	7.4	7.8	7.7
7	8.1	7.8	8.2	7.8	8.2	7.8	8.0	7.8	7.6	7.4	7.8	7.7
8	8.0	7.9	8.1	7.8	7.9	7.6	8.1	7.8	7.8	7.6	7.8	7.6
9	8.0	7.9	7.9	7.8	7.8	7.6	8.1	7.8	8.1	7.7	7.7	7.6
10	8.1	7.9	8.1	7.8	7.9	7.7	8.1	7.7	7.8	7.6	7.7	7.6
11	8.2	8.0	8.3	7.9	8.1	7.9	8.1	7.8	7.8	7.6	7.8	7.6
12	8.2	8.0	8.2	7.9	8.2	8.0	8.2	7.8	7.7	7.5	7.8	7.6
13	8.3	8.0	8.0	7.8	8.2	8.0	8.1	7.8	7.7	7.6	7.8	7.7
14	8.2	7.9	7.8	7.8	8.2	8.0	8.2	7.7	7.7	7.6	7.8	7.6
15	8.2	7.9	7.9	7.8	8.1	8.0	8.2	7.7	7.7	7.5	7.7	7.6
16	8.3	7.9	8.1	7.9	8.1	8.0	8.3	7.7	7.7	7.6	7.8	7.6
17	8.4	7.9	8.1	7.9	8.2	8.0	8.2	7.7	7.7	7.6	7.8	7.6
18	8.1	7.8	8.2	7.9	8.2	7.9	8.2	7.7	7.7	7.6	7.7	7.6
19	7.9	7.7	8.1	8.0	8.0	7.7	8.2	7.6	7.8	7.5	7.7	7.6
20	7.8	7.7	8.2	8.0	7.9	7.8	8.2	7.6	7.9	7.5	7.8	7.6
21	8.0	7.8	8.3	7.9	8.0	7.8	8.2	7.6	7.8	7.6	7.7	7.6
22	8.0	7.8	8.3	8.0	8.1	8.0	8.2	7.6	7.8	7.6	7.8	7.6
23	8.0	7.8	8.2	7.9	8.1	8.0	8.1	7.5	7.8	7.6	7.8	7.7
24	8.2	7.9	8.1	7.9	8.1	8.0	7.9	7.4	7.8	7.6	7.8	7.6
25	8.0	7.9	8.1	7.9	8.1	8.0	8.0	7.6	7.8	7.5	7.8	7.7
26	8.0	7.8	8.1	8.0	8.1	7.8	8.1	7.6	7.8	7.5	7.8	7.7
27	8.2	7.9	8.2	8.0	8.0	7.7	8.0	7.6	7.8	7.5	7.8	7.7
28	8.3	8.0	8.1	8.0	8.1	7.9	7.9	7.6	7.6	7.5	7.9	7.6
29	8.2	8.0	8.1	7.9	8.1	8.1	8.0	7.7	7.7	7.6	7.8	7.7
30	8.3	8.0	8.1	7.9	8.2	8.1	8.0	7.7	7.7	7.6	7.9	7.7
31	---	---	8.1	7.8	---	---	8.0	7.7	7.6	7.6	---	---
MONTH	8.4	7.7	8.3	7.8	8.3	7.6	8.3	7.6	8.1	7.4	7.9	7.6
YEAR	8.4	7.4										

03146500 LICKING RIVER NEAR NEWARK, OH--Continued

TEMPERATURE (DEG. C) OF WATER; WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.5	17.5	13.5	11.5	6.5	4.5	4.0	3.0	---	---	5.5	3.5
2	18.0	15.0	15.0	11.0	6.0	5.0	3.0	1.5	---	---	4.0	2.0
3	15.0	13.5	16.0	13.0	4.5	4.0	2.0	.5	---	---	4.5	2.0
4	15.5	12.5	17.0	15.5	4.0	3.0	3.0	1.0	---	---	5.0	2.5
5	15.0	12.5	18.5	16.0	3.0	2.5	---	---	---	---	5.0	2.0
6	16.5	14.0	18.0	16.5	2.5	1.5	---	---	---	---	6.5	3.0
7	14.0	11.5	17.5	16.0	1.0	.5	---	---	---	---	5.5	3.5
8	13.5	13.0	17.0	16.0	1.0	.0	---	---	---	---	4.5	3.5
9	13.5	12.0	18.0	15.0	1.0	.0	---	---	---	---	6.5	3.5
10	14.0	11.5	17.5	10.5	1.0	.0	---	---	---	---	8.0	3.5
11	12.0	10.5	10.0	7.0	1.0	.5	---	---	---	---	7.0	4.0
12	11.5	9.5	7.0	5.5	2.5	.5	---	---	---	---	6.5	2.5
13	11.0	10.0	6.5	4.5	4.5	3.0	---	---	---	---	3.5	2.0
14	12.5	9.5	6.0	4.5	3.5	1.5	---	---	---	---	2.0	1.0
15	13.0	9.0	8.5	5.5	3.0	2.5	---	---	---	---	2.0	1.0
16	12.0	9.5	10.5	8.5	4.5	3.0	---	---	4.0	2.0	2.5	1.5
17	10.5	7.0	10.5	8.0	5.5	4.0	---	---	5.0	3.0	3.0	1.5
18	12.5	9.0	8.0	6.5	6.5	5.5	---	---	4.0	2.0	4.0	1.5
19	12.0	10.5	7.0	5.0	7.0	6.0	---	---	3.0	1.0	5.0	3.0
20	12.5	9.0	8.5	6.5	6.5	5.0	---	---	3.0	.5	6.0	2.5
21	13.0	9.5	9.5	7.5	5.0	3.0	---	---	4.0	1.0	6.0	4.5
22	14.0	10.5	7.5	6.0	3.0	2.5	---	---	3.5	1.0	6.5	3.5
23	13.5	12.0	8.0	6.0	3.5	2.5	---	---	4.0	.5	7.0	6.5
24	15.0	11.0	7.5	6.5	6.0	3.5	---	---	4.5	2.0	6.5	5.0
25	14.0	12.5	6.0	5.0	6.0	2.0	---	---	4.5	3.0	5.0	4.5
26	16.5	13.5	5.0	2.0	1.5	.5	---	---	4.0	3.5	5.5	4.5
27	16.0	14.5	2.0	1.0	2.0	1.0	---	---	5.5	2.5	5.5	5.0
28	15.0	13.0	2.0	1.0	1.5	.5	---	---	5.0	2.5	8.0	4.5
29	14.0	11.0	2.0	1.0	3.0	1.5	---	---	---	---	10.0	7.0
30	13.0	10.5	4.0	2.5	4.0	2.0	---	---	---	---	9.0	6.0
31	12.5	10.0	---	---	4.5	3.5	---	---	---	---	12.0	7.5
MONTH	19.5	7.0	18.5	1.0	7.0	.0	4.0	.5	5.5	.5	12.0	1.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	15.5	11.0	15.5	10.0	25.0	19.5	23.5	21.0	25.5	20.0	20.5	18.0
2	13.0	9.0	15.5	10.0	23.5	20.5	22.0	19.5	26.5	21.5	21.5	18.5
3	11.5	8.0	16.0	10.0	23.0	19.5	20.5	20.0	25.5	23.0	22.0	18.5
4	13.0	10.0	15.0	10.5	21.0	16.5	21.0	19.0	25.0	20.5	22.5	19.0
5	14.5	11.0	10.5	10.0	22.0	17.5	22.0	19.0	24.0	20.0	23.0	18.5
6	12.5	10.5	11.0	10.0	22.5	17.0	25.5	19.0	21.5	20.0	24.0	19.5
7	14.0	10.5	11.5	10.0	21.0	19.0	25.5	21.0	23.0	20.5	25.0	20.5
8	14.0	11.5	13.5	11.5	20.5	19.5	25.5	22.0	24.5	20.0	25.5	21.5
9	12.0	9.5	15.5	13.5	21.5	19.5	26.0	21.0	25.5	21.5	25.0	21.0
10	15.5	9.5	15.5	13.0	23.0	19.0	25.0	23.0	24.5	22.5	24.5	21.0
11	15.0	12.5	17.0	12.5	24.5	20.0	23.5	19.5	23.5	21.5	24.0	21.0
12	15.5	10.5	16.0	15.0	24.5	21.5	24.0	18.0	22.5	20.5	22.5	20.5
13	15.5	12.0	15.5	14.5	22.0	18.5	22.5	19.0	25.0	21.0	21.5	20.0
14	14.5	10.0	15.0	12.0	21.0	16.5	25.5	20.5	26.0	22.5	22.0	19.5
15	14.5	10.0	12.5	11.5	20.5	16.0	25.5	21.0	26.5	22.0	23.5	20.0
16	13.5	9.0	13.5	12.5	22.5	17.5	25.5	21.5	25.0	22.5	22.0	20.0
17	15.0	9.0	15.5	12.5	24.0	20.0	25.5	19.5	26.0	21.0	21.5	19.0
18	13.5	10.5	18.5	14.0	25.5	21.0	26.0	20.0	27.0	22.0	24.0	20.0
19	11.5	10.5	21.5	15.5	23.0	21.0	27.0	21.0	27.0	22.5	25.0	21.0
20	11.0	9.0	22.0	17.0	24.5	21.5	28.0	22.5	25.5	21.0	25.0	21.5
21	9.0	7.5	20.0	17.5	24.5	22.5	27.5	23.5	24.5	19.5	25.0	21.5
22	11.5	6.5	18.5	14.5	24.0	20.5	28.5	23.5	24.5	19.5	23.5	18.5
23	10.0	9.0	17.5	15.5	24.5	20.5	28.0	24.0	25.0	20.0	20.0	15.5
24	13.5	9.0	17.5	16.0	24.5	21.5	25.0	23.0	26.0	21.0	20.5	17.0
25	12.5	10.0	20.5	16.5	24.5	20.0	24.5	21.5	26.0	22.5	20.0	16.5
26	12.0	9.5	23.0	17.5	25.0	21.0	27.5	22.0	25.0	21.5	19.0	14.5
27	15.0	10.0	24.0	18.5	27.5	22.0	26.0	23.5	24.5	21.0	19.5	14.5
28	16.0	10.5	24.5	19.0	27.5	22.5	26.5	22.0	23.0	21.5	19.0	16.0
29	16.0	11.5	24.0	19.5	28.0	22.5	25.0	21.0	23.5	22.0	17.5	13.5
30	17.0	12.5	23.0	19.5	25.5	22.0	23.5	21.0	21.5	20.0	19.0	14.5
31	---	---	25.0	19.5	---	---	23.0	20.0	20.0	18.5	---	---
MONTH	17.0	6.5	25.0	10.0	28.0	16.0	28.5	18.0	27.0	18.5	25.5	13.5
YEAR	28.5	.0										

03146500 LICKING RIVER NEAR NEWARK, OH--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCTOBER MAX	OCTOBER MIN	NOVEMBER MAX	NOVEMBER MIN	DECEMBER MAX	DECEMBER MIN	JANUARY MAX	JANUARY MIN	FEBRUARY MAX	FEBRUARY MIN	MARCH MAX	MARCH MIN
1	7.5	5.7	10.8	7.5	10.8	10.2	11.3	11.1	13.2	12.8	13.5	11.2
2	8.2	7.5	10.6	7.4	10.5	10.2	11.7	11.3	12.9	12.6	13.8	11.5
3	8.5	8.2	10.4	6.9	10.8	10.6	12.3	11.6	13.1	12.6	13.7	11.6
4	8.6	8.1	9.2	6.3	11.2	10.8	12.4	11.9	13.0	12.6	13.7	11.4
5	8.4	8.1	10.0	6.0	11.1	10.9	---	---	12.7	12.4	14.0	11.5
6	8.7	7.7	9.3	5.6	11.2	11.0	---	---	12.8	12.5	14.4	11.4
7	9.2	8.5	9.1	5.1	11.4	11.1	---	---	12.8	12.6	14.6	11.0
8	9.0	8.4	8.4	5.6	11.6	11.2	---	---	---	---	13.8	11.0
9	9.4	8.7	9.8	5.9	11.6	11.2	---	---	12.7	12.1	15.2	11.1
10	9.5	9.1	7.8	5.7	11.6	11.4	---	---	12.6	12.2	14.8	10.7
11	9.4	9.2	10.5	7.4	11.6	11.3	---	---	12.6	12.2	15.2	10.7
12	9.5	9.2	11.1	8.5	11.4	10.7	---	---	12.4	11.9	12.6	10.5
13	9.5	9.2	11.4	8.9	12.0	10.6	---	---	12.3	11.9	12.7	12.1
14	9.5	9.0	10.7	8.9	12.9	12.2	---	---	12.3	11.9	12.6	12.4
15	9.6	8.9	10.9	8.6	12.5	11.7	---	---	12.6	11.9	12.6	12.0
16	9.4	8.7	9.5	7.7	11.6	11.2	---	---	12.4	11.9	13.2	11.9
17	9.8	9.2	9.5	7.7	11.3	11.0	---	---	12.3	11.7	13.0	12.6
18	9.3	8.9	10.3	9.3	11.0	10.8	---	---	12.5	11.7	13.0	12.4
19	9.2	8.3	11.1	9.7	11.0	10.8	---	---	12.7	11.8	12.6	12.3
20	9.5	8.8	10.7	9.3	11.2	10.8	---	---	12.7	12.1	13.1	12.1
21	9.7	8.7	10.0	8.9	11.6	11.3	---	---	12.7	12.0	12.6	12.1
22	9.9	8.5	10.6	10.0	11.9	11.6	---	---	12.8	11.9	12.8	11.8
23	10.0	8.1	10.9	10.2	12.0	11.6	---	---	12.7	11.9	11.8	11.8
24	10.2	8.4	11.1	10.1	11.6	10.9	---	---	12.7	11.6	12.2	11.6
25	9.5	7.8	11.3	10.3	12.0	10.7	---	---	12.7	11.4	12.4	12.2
26	9.4	7.5	11.9	10.4	12.1	11.9	---	---	13.1	11.4	12.7	12.2
27	9.5	7.1	12.1	11.1	12.1	11.8	---	---	13.1	11.6	12.5	12.2
28	9.9	7.3	12.2	11.3	12.0	11.8	---	---	13.2	11.4	12.2	11.4
29	10.6	7.6	12.3	11.5	11.9	11.5	---	---	---	---	11.7	11.3
30	10.8	7.9	11.7	10.9	11.7	11.3	---	---	---	---	12.2	11.4
31	10.8	7.9	---	---	11.5	11.1	---	---	---	---	11.8	10.4
MONTH	10.8	5.7	12.3	5.1	12.9	10.2	12.4	11.1	13.2	11.4	15.2	10.4

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1	10.6	9.9	12.0	9.5	8.7	6.2	8.1	6.3	9.2	5.4	7.3	6.7
2	11.1	10.1	12.3	9.5	9.0	6.2	7.7	6.4	9.1	5.1	7.4	6.6
3	11.5	10.9	12.7	9.4	9.6	6.6	7.7	6.3	8.4	4.7	6.9	5.8
4	11.2	10.4	11.5	9.1	10.3	6.9	8.0	7.6	9.1	4.8	6.8	6.2
5	11.1	10.4	10.4	7.6	10.4	6.8	8.3	7.4	9.1	5.3	7.0	6.1
6	11.0	10.4	11.5	10.0	11.3	6.7	8.4	7.2	6.9	6.1	6.8	5.9
7	11.3	10.5	12.1	10.2	10.1	6.4	8.7	6.7	6.9	6.5	6.8	5.7
8	10.8	10.5	11.2	9.1	7.1	6.4	9.0	6.4	7.4	6.5	7.1	5.3
9	11.5	10.5	9.4	9.1	7.5	7.1	9.8	6.5	8.4	6.5	6.5	5.2
10	11.1	9.9	10.3	9.2	7.7	7.1	9.6	5.6	6.9	5.6	6.4	5.0
11	10.8	9.7	11.2	9.1	8.2	7.0	10.4	6.2	7.4	6.4	6.7	4.8
12	11.5	10.1	10.2	8.8	8.4	6.9	11.3	6.6	6.8	6.3	6.5	4.7
13	11.6	9.9	9.2	8.8	9.5	6.9	10.5	6.4	6.8	6.3	7.1	4.9
14	12.4	10.0	9.9	9.1	9.4	7.9	11.1	6.2	6.7	5.8	6.9	4.5
15	13.0	10.1	10.1	9.8	8.7	7.3	11.0	5.5	6.0	5.3	6.4	4.3
16	13.7	10.1	10.3	9.7	8.8	7.2	11.5	5.3	5.9	4.8	6.6	4.8
17	14.0	10.1	10.2	9.1	8.6	6.9	11.7	5.8	6.5	4.2	6.7	4.9
18	11.9	9.6	9.9	8.9	8.7	5.5	11.6	5.7	6.7	4.7	6.9	4.7
19	10.7	9.9	9.6	8.3	7.5	5.9	11.8	5.2	---	---	6.8	4.3
20	10.9	10.2	9.7	7.6	7.4	6.5	12.0	4.8	---	---	7.2	4.0
21	11.7	10.9	10.3	7.7	7.1	6.8	11.1	4.7	---	---	6.8	3.8
22	12.1	11.0	10.8	8.4	7.6	7.0	11.4	4.2	7.9	5.3	---	---
23	11.7	11.0	10.2	8.3	7.5	6.9	9.7	4.0	8.2	4.5	---	---
24	11.8	10.4	9.2	7.8	7.4	6.7	8.4	3.4	8.2	4.2	---	---
25	11.1	10.2	9.3	8.4	7.5	6.6	9.2	4.9	7.9	3.8	---	---
26	11.2	10.6	9.5	8.1	7.4	5.8	9.4	5.2	7.6	3.5	---	---
27	11.5	10.3	9.4	7.8	6.9	6.1	8.6	4.6	6.3	4.4	7.5	5.1
28	11.6	10.1	9.2	7.4	7.2	5.7	9.9	4.7	6.7	6.2	7.6	4.6
29	11.4	9.8	9.2	7.1	7.2	6.3	8.2	5.5	6.9	6.4	7.8	5.2
30	11.4	9.4	9.5	6.9	7.6	6.2	8.3	5.1	7.3	6.8	8.1	4.8
31	---	---	8.7	6.7	---	---	8.5	5.7	7.5	7.3	---	---
MONTH	14.0	9.4	12.7	6.7	11.3	5.5	12.0	3.4	9.2	3.5	8.1	3.8
YEAR	15.2	3.4										

03147500 LICKING RIVER BELOW DILLON DAM, NEAR DILLON FALLS, OH

LOCATION.--Lat 39°59'18", long 82°04'50", in T.1 N., R.8 W., Muskingum County, Hydrologic Unit 05040006, on left bank 500 ft (152 m) downstream from Dillon Dam, 2.0 mi (3.2 km) northwest of Dillon Falls, and 5.8 mi (9.3 km) upstream from mouth.

DRAINAGE AREA.--742 mi² (1,922 km²).

PERIOD OF RECORD.--October 1939 to current year. Prior to October 1962, published as Licking River at Dillon.

REVISED RECORDS.--WSP 2107: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 700.0 ft (213.36 m) Corps of Engineers bench mark. Prior to Oct. 27, 1940, water-stage recorder at site 2.3 mi (3.7 km) downstream at different datum. Oct. 27, 1940, to Sept. 30, 1962, water-stage recorder at site 2.6 mi (4.2 km) downstream at datum 16.3 ft (4.97 m) lower.

REMARKS.--Records good. Flow regulated by Dillon Lake since December 1960 (see station 03147300). Water-quality data collected at this site 1965 to 1977. Water-temperature data collected 1961 to 1975.

AVERAGE DISCHARGE.--39 years, 789 ft³/s (22.34 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,000 ft³/s (1,330 m³/s) Jan. 22, 1959, gage height, 32.46 ft (9.894 m); minimum daily, 19 ft³/s (0.54 m³/s) Dec. 22, 1960.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 37.0 ft (11.28 m) site and datum in use 1940-62, from floodmark, backwater from Muskingum River.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,170 ft³/s (118 m³/s) Mar. 28, gage height, 9.33 ft (2.844 m); minimum daily, 103 ft³/s (2.92 m³/s) Jan. 29, Aug. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	375	220	1070	476	1950	105	4040	892	684	687	172	3830
2	1320	208	2220	476	1880	311	4060	716	507	342	142	3880
3	2170	185	2730	439	1850	548	4050	628	453	532	103	3670
4	2450	185	2710	324	1820	442	4050	547	388	891	142	1720
5	2600	186	2740	378	1810	247	4050	1330	280	714	162	705
6	2090	186	2170	430	1810	134	4040	1760	315	415	692	772
7	900	186	1660	439	1840	156	4020	1490	401	356	997	678
8	395	226	2810	606	1850	266	4020	1200	1380	356	410	556
9	1020	228	3450	1820	1850	517	4020	2160	2740	301	318	448
10	1570	225	3480	1880	1820	541	4020	2820	3440	271	503	295
11	1130	248	3420	1950	1170	265	3960	2740	2950	272	643	248
12	704	187	3380	2300	627	501	3960	1350	1420	250	638	288
13	522	185	3250	2260	469	914	4000	1840	927	219	1130	281
14	468	158	2090	2040	443	764	3980	2730	804	218	740	246
15	344	233	478	1970	474	160	3780	2710	544	218	282	393
16	298	371	774	1190	472	832	2000	2900	391	218	246	354
17	329	630	777	747	471	2910	815	2940	339	218	224	298
18	329	1050	780	780	471	3580	563	2860	389	198	188	298
19	325	788	780	715	437	3950	749	2710	1570	161	164	275
20	327	535	780	870	336	3970	1420	1560	2850	161	331	245
21	272	705	780	990	203	4000	2660	1030	2920	162	293	244
22	242	1160	780	802	161	4020	2680	896	2790	205	190	183
23	242	1620	780	704	290	4020	2660	855	1960	224	177	155
24	242	1540	3070	601	672	4000	2600	881	1390	269	132	178
25	244	1170	3650	631	826	3980	2540	1690	1190	240	132	191
26	244	1030	3490	736	425	2700	2540	1600	1020	199	131	192
27	221	947	2760	601	107	946	2530	869	1000	187	877	179
28	187	898	1050	108	106	3310	2030	739	1040	161	3070	158
29	188	886	593	103	---	4160	1220	627	1050	128	3410	158
30	199	733	594	218	---	4110	937	544	1050	128	3330	160
31	219	---	485	1110	---	4070	---	637	---	175	3460	---
TOTAL	22166	17109	59581	28694	26640	60429	88014	48251	38162	9076	23429	21278
MEAN	715	570	1922	926	951	1949	2934	1556	1272	293	756	709
MAX	2600	1620	3650	2300	1950	4160	4060	2940	3440	891	3460	3880
MIN	187	158	478	103	106	105	563	544	280	128	103	155

CAL YR 1977 TOTAL 269357 MEAN 738 MAX 3650 MIN 75
WTR YR 1978 TOTAL 442829 MEAN 1213 MAX 4160 MIN 103

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH

(National stream quality accounting network station)

LOCATION.--Lat 39°18'42", long 81°51'00", in SE 1/4 sec. 11, T.10 N., R.12 W., Morgan County, Hydrologic Unit 05040C04, on left bank just upstream from Dam 7, at McConnelsville, and 3.5 mi (5.6 km) downstream from Oilspring Run.

DRAINAGE AREA.--7,422 mi² (19,223 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1921 to current year.

REVISED RECORDS.--WSP 783: 1933(M). WSP 853: 1933(P). WSP 1173: 1922-24, 1928(M). WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 650.31 ft (198.214 m) National Geodetic Vertical Datum of 1929. Prior to July 27, 1922, nonrecording gage at site 0.5 mi (0.8 km) upstream at same datum. July 27, 1922, to Aug. 10, 1926, nonrecording gage and Aug. 11, 1926, to Sept. 8, 1959, water-stage recorder at present site and datum. Sept. 9, 1959, to July 14, 1960, nonrecording gage at site 0.5 mi (0.8 km) upstream at same datum.

REMARKS.--Records good. Flow regulated by 17 flood-control reservoirs 36.6 mi (58.9 km) to 148 mi (238 km) upstream from station. Some regulation at low flow by powerplant 19 mi (31 km) upstream from station.

AVERAGE DISCHARGE.--57 years, 7,372 ft³/s (208.8 m³/s)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 126,000 ft³/s (3,570 m³/s) Jan. 26, 1937, gage height, 21.14 ft (6.443 m); minimum daily, 325 ft³/s (9.20 m³/s) Oct. 12, 1930, may have been lower during August 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 27, 1913 reached a stage of 33.5 ft (10.21 m), discharge, 270,000 ft³/s (7,650 m³/s), computed by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 37,600 ft³/s (1,060 m³/s) Mar. 15, gage height, 10.33 ft (3.149 m); minimum daily, 1,650 ft³/s (47.1 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3260	2480	16000	9780	12400	3810	30200	10000	6530	8530	2180	6890
2	9450	2440	17200	8950	11800	3810	29200	9090	8610	7280	2220	6860
3	11300	2400	18500	8220	11500	4320	28300	8380	8020	6850	2120	7910
4	9820	2360	17700	7240	12100	4410	28200	9130	7150	10300	2100	7670
5	8980	2340	19700	6600	13400	3940	28600	10600	6380	10300	2240	3920
6	7720	2340	24000	6180	14200	3830	28700	10700	5800	8740	3070	3550
7	5740	2420	23000	5860	13500	3550	30600	10200	5410	7340	5000	3210
8	5170	2540	22100	10000	13500	3550	29400	9440	12000	6290	4490	2900
9	5740	2850	21400	18300	13500	3680	27500	13500	19000	5510	4550	2800
10	8110	3250	18700	19300	11000	3470	25700	15400	14900	5030	4520	2250
11	9130	3680	15700	17400	8800	4320	24300	15700	18200	4850	5470	2080
12	7590	4100	13500	15800	7240	4470	23100	13700	15500	4390	7770	2400
13	6250	4640	12400	15700	6770	13100	21000	12800	13200	3980	7780	3000
14	5370	4190	17800	15000	6310	26430	19000	16800	11100	3760	5940	3150
15	4900	3780	25800	13300	6040	34500	16700	19900	9310	3690	4160	3200
16	4490	3780	27400	10500	5650	27000	13500	20100	7940	4400	3540	3150
17	4300	4720	28500	9530	5470	27200	10500	19400	7180	4350	3220	3050
18	4100	7940	27400	8580	5340	24200	9650	14900	6800	3810	2790	2900
19	4050	9860	26100	7470	5140	30400	11100	14900	10900	3540	2590	2800
20	3970	8800	25500	7520	4960	29800	15500	14400	14000	3360	2700	2300
21	3830	7830	25400	7240	4580	30100	18400	17600	14000	3160	3010	2190
22	3650	8330	25600	6570	4700	29900	20100	15400	12500	2950	2420	2080
23	3550	9530	25100	6210	4440	29200	20200	13800	9700	2670	2190	1880
24	3400	9200	24300	5800	4410	29900	19100	12700	7540	2770	2040	1830
25	3230	7900	23000	7100	4720	30800	17700	14500	6370	2880	1930	1810
26	3130	7000	19500	13500	4670	34100	17700	16400	5860	3520	1830	1700
27	2990	6700	18000	14400	3940	34700	16500	14800	7570	3060	3210	1620
28	2890	6000	15000	16700	3860	31300	14900	12300	9280	2620	7010	1570
29	2780	5500	14700	16000	---	31030	12700	10400	11800	2420	6880	1470
30	2690	7600	14200	12500	---	31300	11000	9210	10200	2370	6200	1450
31	2580	---	12100	12100	---	31100	---	8910	---	2430	8710	---
TOTAL	164180	136500	636500	340310	224090	812960	618850	428060	308930	148950	123980	98410
MEAN	5296	5217	20530	10980	8003	19770	20630	13810	10300	4805	3996	3214
MAX	11300	9860	28500	19300	14200	34700	30600	20100	19000	10300	8710	8890
MIN	2580	2340	12100	5800	3860	3550	9450	8130	5410	2370	1830	1450

CAL YR 1977 TOTAL 2810460 MEAN 7701 MAX 28900 MIN 1050
WTR YR 1978 TOTAL 3859620 MEAN 10570 MAX 34700 MIN 1450

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

WATER-QUALITY RECORDS

LOCATION.--Water-quality monitor on left bank, 1.0 mi (1.6 km) upstream from discharge station. Samples collected at bridge on State Highways 37 and 78, 240 ft (73 m) downstream from water-quality monitor. Prior to January 1973, sampling site at discharge station.

PERIOD OF RECORD.--Water year 1950 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 1973 to current year.
pH: February 1973 to current year.
WATER TEMPERATURES: February 1973 to current year.
DISSOLVED OXYGEN: February 1973 to current year.

INSTRUMENTATION.--Water-quality monitor since February 1973.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. Dissolved oxygen concentrations listed as 15.0 mg/L represent concentrations of 15.0 mg/L or higher, due to instrument limitations prior to February 28, 1978; 20.0 mg/L limitation thereafter.

COOPERATION.--Pesticide analyses furnished by Environmental Protection Agency.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,880 micromhos July 7, 1974; minimum, 270 micromhos Mar. 16, 1978.
pH: Maximum, 9.3 units Feb. 16, 1974; minimum, 5.4 units Apr. 15, 1973.
WATER TEMPERATURES: Maximum, 33.5°C Aug. 8, 1973; minimum, 0.0°C on several days during winter periods.
DISSOLVED OXYGEN: Maximum, 15.0 mg/L or higher Dec. 20-27, 1975 (revised); minimum, 2.4 mg/L June 19, 1976.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,060 micromhos Aug. 11; minimum recorded, 270 micromhos Mar. 16.
pH: Maximum recorded, 8.8 units July 15-17, 21-23, Aug. 2; minimum recorded, 6.9 units Jan. 28-30.
WATER TEMPERATURES: Maximum recorded, 28.0°C July 23-25, minimum recorded, 0.0°C on several days during winter period.
DISSOLVED OXYGEN: Maximum recorded, 14.0 mg/L Dec. 10; minimum recorded, 4.3 mg/L Sept. 14.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	pH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT												
04...	1200	905	7.5	17.0	50	--	8.3	85	--	--	1500	1500
NOV												
02...	1400	930	8.0	14.0	9	--	8.7	84	--	--	40	28
DEC												
07...	1300	435	7.7	2.5	90	--	13.0	95	--	--	17000	90000
JAN												
11...	1400	520	7.7	.0	45	--	14.0	96	--	--	2400	8000
FEB												
07...	1330	525	7.6	.5	8	--	13.6	94	--	--	1500	620
MAR												
15...	1500	350	7.3	2.5	200	--	13.2	96	--	--	1800	9000
APR												
11...	1230	447	7.4	12.0	25	--	11.3	105	20	--	520	8420
MAY												
02...	1430	590	7.8	14.0	15	--	10.9	100	20	--	430	97
JUN												
06...	1413	831	7.7	21.5	20	--	8.6	97	20	--	110	73
JUL												
18...	1530	890	8.5	25.0	--	15	8.5	100	25	--	250	30
AUG												
08...	1315	783	7.7	24.0	--	8.0	7.1	84	--	100	540	210
SEP												
07...	1130	857	7.5	22.5	--	15	7.1	80	--	6	500	85

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	HARDNESS (MG/L AS CACO3)	HARD. NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT												
04...	180	100	50	14	24	3.1	97	0	80	4.9	88	49
NOV												
02...	330	190	86	26	62	2.6	170	0	140	2.7	170	100
DEC												
07...	140	84	38	12	16	3.8	73	0	60	2.3	74	31
JAN												
11...	170	110	46	14	28	3.1	78	0	64	2.5	85	35
FEB												
07...	210	120	58	17	25	2.9	110	0	90	4.4	100	44
MAR												
15...	110	71	29	8.6	15	3.2	45	0	37	3.6	60	30
APR												
11...	180	96	47	14	16	2.5	96	0	79	6.1	86	31
MAY												
02...	220	120	54	18	23	2.6	120	0	98	3.0	110	44
JUN												
06...	250	150	68	20	62	3.6	130	0	110	4.2	140	100
JUL												
18...	310	140	58	23	44	3.5	--	--	120	--	180	43
AUG												
08...	240	180	76	25	34	4.0	--	--	110	--	150	69
SEP												
07...	240	150	64	19	28	3.3	--	--	92	--	130	53

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NITRATE TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M
OCT												
04...	.1	7.2	299	285	--	--	--	--	.13	15	--	--
NOV												
02...	.3	7.2	572	540	--	--	--	--	.11	--	93000	42.0
DEC												
07...	.2	9.2	239	223	--	--	--	--	.59	11	--	--
JAN												
11...	.1	7.3	283	278	--	--	--	--	.19	--	--	--
FEB												
07...	.1	8.0	344	309	.52	.75	2.4	11	.04	2.3	--	--
MAR												
15...	.1	8.0	192	174	2.0	2.3	4.1	18	.09	13	2100	--
APR												
11...	.1	8.7	289	251	.35	.60	2.3	10	.12	4.2	--	--
MAY												
02...	.2	9.0	355	320	.35	.64	1.7	7.7	.10	--	32000	25.0
JUN												
06...	.2	7.3	324	465	.60	.65	2.1	9.1	.04	8.5	4000	22.0
JUL												
18...	.3	9.3	519	504	39	39	40	180	.05	--	--	--
AUG												
08...	.2	3.2	500	428	.54	.99	2.0	8.8	.08	4.6	--	--
SEP												
07...	.3	7.5	395	381	.74	.80	1.0	8.0	.09	5.5	--	--

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

ANALYSES OF MINOR ELEMENTS

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
NOV												
02...	1400	1	1	0	0	30	13	0	0	12	6	1000
JAN												
11...	1400	1	0	1	1	<10	3	3	2	21	5	4300
MAY												
02...	1430	1	1	2	0	20	1	2	2	10	5	1000
JUL												
18...	1530	1	0	0	0	20	7	0	0	9	5	1100

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV											
02...	30	8	4	370	240	<.5	<.5	0	0	20	10
JAN											
11...	50	12	12	440	300	<.5	<.5	0	0	20	10
MAY											
02...	170	31	3	260	120	<.5	<.5	0	0	20	10
JUL											
18...	0	44	44	230	50	.5	.5	0	0	30	20

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT					
04...	1200	4740	17.0	58	2310
NOV					
02...	1400	2440	14.0	16	105
DEC					
07...	1500	23500	2.5	508	32200
JAN					
11...	1400	16800	.0	76	3450
FEB					
07...	1330	13600	.5	31	1140
MAR					
15...	1500	33000	2.5	652	59000
APR					
11...	1230	24300	12.0	76	4990
MAY					
02...	1430	9210	14.0	28	696
JUN					
06...	1413	5830	21.5	32	504
JUL					
18...	1530	3910	25.0	23	243
AUG					
08...	1315	4520	24.0	28	342
SEP					
07...	1130	3220	22.5	40	348

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

PESTICIDE ANALYSES

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ATRAZINE, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL (UG/L)
NOV											
02...	1400	ND	--	ND	ND	--	ND	--	ND	--	ND
FEB											
07...	1330	ND	--	--	ND	--	ND	--	ND	--	ND
MAY											
02...	1450	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG											
08...	1315	ND	--	1.9	ND	--	ND	--	ND	--	ND

DATE	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL (UG/L)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN TOTAL (UG/L)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL (UG/L)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
NOV											
02...	--	ND	--	ND	--	ND	--	ND	--	ND	--
FEB											
07...	--	ND	--	ND	--	ND	--	ND	--	ND	--
MAY											
02...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG											
08...	--	ND	--	ND	--	ND	--	ND	--	ND	--

DATE	HEPTACHLOR EPOXIDE TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL (UG/L)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHYL PARATHION, TOTAL (UG/L)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOTAL (UG/L)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)
NOV										
02...	ND	--	ND	--	ND	--	ND	--	ND	--
FEB										
07...	ND	--	ND	--	ND	--	ND	--	ND	--
MAY										
02...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG										
08...	ND	--	ND	--	ND	--	ND	--	ND	--

DATE	PARATHION, TOTAL (UG/L)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	SIMAZINE TOTAL COULSON COND. (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOTAL TRITHION (UG/L)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	2,4-D, TOTAL (UG/L)	2,4,5 T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
NOV										
02...	ND	--	ND	ND	--	ND	--	ND	ND	ND
FEB										
07...	ND	--	--	ND	--	ND	--	--	--	--
MAY										
02...	ND	ND	ND	ND	ND	ND	ND	--	--	--
AUG										
08...	ND	--	ND	ND	--	ND	--	--	--	--

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCTOBER MAX	OCTOBER MIN	NOVEMBER MAX	NOVEMBER MIN	DECEMBER MAX	DECEMBER MIN	JANUARY MAX	JANUARY MIN	FEBRUARY MAX	FEBRUARY MIN	MARCH MAX	MARCH MIN
1	---	---	1040	905	698	659	---	---	473	458	837	792
2	---	---	972	914	677	525	---	---	483	471	839	794
3	---	---	965	938	590	530	---	---	530	483	809	746
4	---	---	935	896	536	465	---	---	567	530	783	764
5	---	---	906	879	497	429	---	---	570	549	---	---
6	---	---	930	896	455	401	---	---	548	522	797	764
7	---	---	897	873	458	380	---	---	542	522	786	705
8	---	---	897	881	416	398	---	---	549	534	798	717
9	---	---	908	885	407	387	---	---	533	515	830	779
10	---	---	918	900	428	389	---	---	561	527	---	---
11	---	---	911	893	465	414	---	---	596	560	---	---
12	---	---	---	---	483	467	---	---	638	599	---	---
13	---	---	---	---	537	485	---	---	672	632	635	618
14	---	---	---	---	561	489	---	---	708	644	621	411
15	---	---	---	---	506	390	---	---	716	674	407	299
16	---	---	---	---	426	363	554	539	722	687	299	270
17	---	---	---	---	378	332	588	557	731	674	306	279
18	---	---	---	---	363	329	612	591	759	692	---	---
19	---	---	---	---	449	350	599	584	767	690	---	---
20	---	---	---	---	402	359	617	590	774	731	333	321
21	---	---	684	611	488	398	627	614	773	758	350	333
22	---	---	702	609	437	414	627	618	804	755	371	351
23	---	---	731	606	453	429	656	623	819	755	374	350
24	---	---	644	605	441	422	657	635	822	767	354	350
25	---	---	659	627	440	429	666	639	824	791	---	---
26	---	---	747	603	462	429	633	524	803	771	---	---
27	981	956	773	614	479	452	536	503	806	749	---	---
28	990	969	659	626	497	428	513	497	827	671	---	---
29	996	986	669	642	456	437	515	482	---	---	---	---
30	993	977	672	644	---	---	474	423	---	---	368	365
31	1010	980	---	---	---	---	473	429	---	---	383	368
MONTH	1010	956	1040	603	698	329	666	423	827	458	839	270

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1	393	383	563	543	---	---	576	518	851	807	603	536
2	395	389	602	561	---	---	545	522	908	857	603	561
3	407	392	614	599	---	---	546	530	876	815	606	566
4	---	---	644	597	---	---	575	539	857	819	609	573
5	---	---	597	578	---	---	645	572	876	858	575	557
6	---	---	582	561	852	830	633	588	954	872	653	558
7	---	---	582	569	857	756	638	620	999	899	660	636
8	---	---	623	584	749	495	647	608	899	740	651	633
9	---	---	606	557	533	407	740	654	821	738	701	653
10	---	---	558	527	536	468	752	713	995	803	731	702
11	449	441	540	528	507	393	714	698	1060	789	738	729
12	462	446	545	515	414	387	737	714	780	698	749	731
13	474	458	630	555	464	419	740	731	747	674	764	744
14	515	473	558	533	506	465	743	723	734	560	807	768
15	513	498	539	488	527	507	735	725	636	546	824	809
16	522	509	521	458	590	528	776	737	710	642	890	821
17	557	518	459	447	653	594	791	765	752	708	947	896
18	576	557	558	458	725	657	891	797	810	756	941	918
19	588	573	561	513	689	603	839	738	867	813	915	843
20	581	495	507	491	582	440	734	716	812	756	975	876
21	491	476	488	468	585	516	749	723	791	768	954	872
22	515	480	501	482	600	552	770	746	825	794	933	833
23	488	446	515	500	576	521	762	738	833	800	828	693
24	504	492	560	516	644	585	767	737	816	800	695	663
25	500	470	555	536	708	645	801	767	809	794	777	696
26	474	464	536	512	720	686	822	795	831	795	815	780
27	477	467	582	522	683	635	872	821	891	833	831	816
28	551	477	611	558	684	624	884	863	929	536	860	831
29	552	513	609	570	665	480	921	866	564	498	872	848
30	543	515	587	570	624	486	969	920	564	546	896	876
31	---	---	614	582	---	---	969	836	557	534	---	---
MONTH	588	383	644	447	857	387	969	518	1060	498	975	536
YEAR	1060	270										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	7.9	7.8	8.2	7.6	---	---	7.5	7.1	8.0	7.6
2	---	---	8.0	7.6	7.9	7.6	---	---	7.8	7.3	7.9	7.5
3	---	---	8.1	7.6	7.7	7.4	---	---	7.8	7.2	7.7	7.5
4	---	---	8.0	7.9	7.8	7.6	---	---	8.0	7.4	7.7	7.5
5	---	---	8.3	7.9	7.7	7.5	---	---	8.3	7.5	---	---
6	---	---	8.2	8.0	7.9	7.7	---	---	8.0	7.5	8.0	7.8
7	---	---	8.0	8.0	8.0	7.8	---	---	7.8	7.4	7.8	7.7
8	---	---	8.0	7.9	8.2	8.0	---	---	7.9	7.4	7.7	7.7
9	---	---	8.2	7.8	8.3	8.2	---	---	8.0	7.6	7.9	7.6
10	---	---	8.2	7.6	8.3	8.2	---	---	8.0	7.5	---	---
11	---	---	7.6	7.3	8.3	8.1	---	---	8.0	7.6	---	---
12	---	---	---	---	8.4	8.2	---	---	8.2	7.7	---	---
13	---	---	---	---	8.5	8.3	---	---	7.8	7.7	7.7	7.6
14	---	---	---	---	8.4	8.2	---	---	8.1	7.7	7.7	7.5
15	---	---	---	---	8.4	8.0	---	---	8.2	7.6	7.4	7.1
16	---	---	---	---	8.2	8.0	7.7	7.6	8.1	7.8	7.1	7.0
17	---	---	---	---	8.3	8.1	7.8	7.2	8.1	7.8	7.2	7.0
18	---	---	---	---	8.4	8.1	7.4	7.0	8.2	7.8	---	---
19	---	---	---	---	8.2	8.1	7.5	7.3	8.2	7.6	---	---
20	---	---	---	---	8.4	8.2	7.5	7.3	---	---	7.7	7.2
21	---	---	7.9	7.8	8.2	8.1	7.5	7.3	---	---	7.7	7.5
22	---	---	7.8	7.7	8.3	8.1	7.5	7.3	---	---	7.7	7.3
23	---	---	8.1	7.7	8.4	8.1	7.5	7.3	---	---	7.6	7.4
24	---	---	8.0	7.8	8.5	8.3	7.5	7.4	---	---	7.5	7.4
25	---	---	7.9	7.7	8.5	8.1	7.5	7.3	---	---	---	---
26	---	---	7.8	7.6	8.2	8.0	7.5	7.2	---	---	---	---
27	8.1	7.9	7.7	7.5	8.3	8.1	7.5	7.3	---	---	---	---
28	8.1	7.9	7.9	7.7	8.2	7.9	7.4	6.9	7.9	7.7	---	---
29	8.0	7.8	7.8	7.7	8.1	7.9	7.2	6.9	---	---	---	---
30	8.0	7.7	8.0	7.8	---	---	7.2	6.9	---	---	7.5	7.5
31	8.1	7.6	---	---	---	---	7.3	7.0	---	---	7.9	7.4
MONTH	8.1	7.6	8.3	7.3	8.5	7.4	7.8	6.9	8.3	7.1	8.0	7.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.9	7.8	7.8	7.2	---	---	7.7	7.5	8.6	8.2	7.5	7.3
2	7.7	7.5	7.9	7.4	---	---	7.7	7.6	8.8	8.3	7.5	7.3
3	7.8	7.5	8.1	7.4	---	---	7.7	7.6	8.5	8.3	7.5	7.4
4	---	---	7.8	7.6	---	---	7.7	7.5	8.6	8.3	7.5	7.4
5	---	---	7.5	7.1	---	---	7.8	7.6	8.5	8.3	7.5	7.2
6	---	---	7.5	7.1	7.8	7.7	7.8	7.6	8.3	8.1	7.7	7.3
7	---	---	7.6	7.3	7.9	7.7	7.8	7.7	8.2	7.9	8.0	7.5
8	---	---	7.6	7.5	7.8	7.2	7.8	7.7	7.9	7.5	8.0	7.6
9	---	---	7.6	7.3	7.4	7.2	7.9	7.7	8.2	7.7	8.1	7.8
10	---	---	7.5	7.3	7.5	7.2	8.0	7.8	8.4	8.1	8.3	7.8
11	7.4	7.2	7.6	7.1	7.5	7.2	8.1	7.8	8.3	7.9	8.5	7.8
12	7.7	7.2	7.4	7.3	7.5	7.3	8.5	7.9	7.8	7.6	7.9	7.6
13	7.5	7.3	7.4	7.3	7.4	7.3	8.5	8.1	7.8	7.6	7.7	7.4
14	7.5	7.1	7.3	7.1	7.5	7.2	8.6	8.2	7.7	7.6	7.4	7.3
15	7.6	7.2	7.3	7.1	7.6	7.3	8.8	8.4	7.8	7.6	7.4	7.3
16	7.6	7.1	7.3	7.2	7.7	7.5	8.8	8.2	7.7	7.6	7.6	7.2
17	7.8	7.2	7.4	7.1	7.9	7.6	8.8	8.2	7.9	7.6	7.6	7.5
18	7.6	7.4	7.6	7.3	7.9	7.6	8.7	8.5	8.2	7.8	7.8	7.6
19	7.7	7.3	7.6	7.3	7.8	7.4	8.7	8.2	8.5	7.9	7.7	7.5
20	7.3	7.2	7.6	7.2	7.7	7.3	8.7	8.2	8.1	7.9	7.7	7.6
21	7.2	7.1	7.5	7.3	7.7	7.6	8.8	8.4	8.2	7.8	7.7	7.6
22	7.5	7.0	7.6	7.2	7.6	7.4	8.8	8.6	8.4	8.0	7.6	7.4
23	7.4	7.1	7.5	7.4	7.7	7.4	8.8	8.6	8.4	8.2	7.6	7.3
24	7.7	7.2	7.6	7.5	7.8	7.6	8.7	8.4	8.4	8.1	7.5	7.4
25	7.5	7.3	7.7	7.3	7.9	7.7	8.4	8.1	8.5	8.0	7.8	7.4
26	7.5	7.2	7.6	7.3	7.9	7.8	8.2	8.0	8.5	8.0	8.1	7.5
27	7.7	7.2	7.6	7.4	7.9	7.7	8.2	8.0	8.2	8.0	8.5	7.7
28	7.7	7.2	7.6	7.3	8.0	7.7	8.6	8.1	7.9	7.3	8.2	7.9
29	7.8	7.3	7.8	7.4	7.7	7.5	8.6	8.4	7.4	7.3	8.5	7.8
30	7.8	7.5	7.8	7.6	7.7	7.5	8.5	8.3	7.4	7.3	8.4	7.9
31	---	---	7.7	7.6	---	---	8.4	8.3	7.4	7.3	---	---
MONTH	7.9	7.0	8.1	7.1	8.0	7.2	8.8	7.5	8.8	7.3	8.5	7.2
YEAR	8.8	6.9										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	15.0	13.5	5.5	4.0	---	---	.5	.5	.5	.5
2	---	---	15.0	13.5	6.0	5.0	---	---	.5	.5	.5	.0
3	---	---	14.5	14.0	6.0	5.5	---	---	.5	.5	.5	.5
4	---	---	14.5	14.0	6.0	5.0	---	---	.5	.5	.5	.0
5	---	---	16.0	14.0	6.0	5.0	---	---	.5	.5	---	---
6	---	---	16.0	15.5	5.0	3.5	---	---	.5	.5	.5	.5
7	---	---	16.5	16.0	3.5	2.0	---	---	.5	.0	.5	.5
8	---	---	17.0	16.5	2.0	1.0	---	---	.5	.5	.5	.5
9	---	---	17.5	17.0	1.5	.5	---	---	.5	.5	1.5	.5
10	---	---	18.0	16.5	1.0	.0	---	---	.5	.5	---	---
11	---	---	16.0	15.0	1.0	.0	---	---	.5	.5	---	---
12	---	---	---	---	1.0	.0	---	---	.5	.5	---	---
13	---	---	---	---	1.5	.0	---	---	.5	.5	4.0	4.0
14	---	---	---	---	2.0	1.0	---	---	.5	.5	4.0	3.0
15	---	---	---	---	3.5	2.0	---	---	.5	.5	3.0	2.5
16	---	---	---	---	3.5	3.0	1.0	1.0	.5	.5	3.0	2.5
17	---	---	---	---	4.0	3.0	1.0	1.0	.5	.0	3.0	3.0
18	---	---	---	---	4.0	3.0	1.0	.5	.5	.0	---	---
19	---	---	---	---	7.0	3.5	1.0	.5	.5	.0	---	---
20	---	---	---	---	4.5	4.0	1.0	.5	.5	.0	4.0	3.0
21	---	---	8.5	8.0	5.0	3.5	1.0	.5	.5	.0	4.5	4.0
22	---	---	8.5	8.0	4.0	3.0	1.0	1.0	.5	.0	6.0	4.5
23	---	---	10.5	8.0	3.0	2.5	1.0	1.0	.5	.0	6.5	6.0
24	---	---	9.0	8.5	3.0	2.5	1.0	.5	.5	.0	6.5	6.5
25	---	---	9.0	8.0	3.5	3.0	.5	.5	.5	.0	---	---
26	---	---	8.5	6.0	2.5	1.5	.5	.5	.5	.0	---	---
27	14.0	13.5	6.5	5.0	2.0	1.0	1.0	.5	.5	.0	---	---
28	14.5	14.0	5.0	4.5	1.5	.5	.5	.5	.5	.0	---	---
29	15.0	14.5	4.5	3.5	1.0	.5	1.0	.5	---	---	---	---
30	15.0	14.5	4.5	3.5	---	---	.5	.5	---	---	6.5	6.5
31	15.5	14.5	---	---	---	---	.5	.5	---	---	7.5	6.5
MONTH	15.5	13.5	18.0	3.5	7.0	.0	1.0	.5	.5	.0	7.5	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.5	7.5	14.5	14.0	---	---	25.0	24.5	26.5	25.5	23.0	22.5
2	10.0	9.0	14.5	14.0	---	---	24.5	24.0	27.0	25.5	22.5	21.5
3	9.0	9.0	14.5	14.0	---	---	24.0	22.0	26.0	25.5	22.0	21.5
4	---	---	14.5	13.5	---	---	22.0	21.5	26.0	25.5	22.0	21.5
5	---	---	13.5	12.5	---	---	21.5	21.0	26.0	25.5	22.5	21.5
6	---	---	12.5	12.0	21.5	21.5	22.0	21.0	25.5	25.5	23.0	22.0
7	---	---	12.0	12.0	21.5	21.0	23.0	22.0	25.5	25.0	24.0	22.5
8	---	---	12.0	12.0	22.0	20.5	24.0	23.0	25.0	24.0	24.0	23.0
9	---	---	13.5	12.0	21.0	20.0	24.5	24.0	25.0	24.0	24.5	24.0
10	---	---	14.0	13.5	21.0	20.5	25.0	24.5	25.0	24.5	26.0	24.5
11	12.5	12.0	14.5	14.0	21.0	20.5	25.0	25.0	25.0	24.5	26.5	25.5
12	12.5	12.0	15.0	14.5	22.0	21.0	25.0	24.5	24.5	24.5	25.5	25.5
13	13.5	12.5	15.5	15.0	22.0	21.5	25.0	24.0	24.5	24.0	25.5	25.5
14	13.0	12.5	15.5	14.5	21.5	20.5	24.0	23.5	25.0	24.0	26.0	25.5
15	13.0	12.5	14.5	14.0	20.5	20.0	24.5	23.5	25.5	25.0	25.0	25.0
16	13.0	12.5	14.0	13.5	20.5	20.0	25.0	24.5	26.0	25.5	25.0	24.5
17	12.5	12.5	14.0	13.5	21.5	20.5	25.5	25.0	26.5	26.0	24.5	24.0
18	12.5	12.0	15.0	14.0	22.5	21.5	25.5	25.0	27.0	26.0	24.0	23.5
19	12.5	12.0	16.0	15.0	23.5	22.5	25.5	25.0	27.5	26.5	24.5	23.5
20	12.0	11.5	17.5	16.0	24.0	22.0	26.0	25.0	27.0	26.5	25.0	24.0
21	11.5	10.5	18.5	17.5	24.0	23.0	26.5	25.5	27.0	26.5	25.5	25.0
22	10.5	10.0	19.0	18.5	24.0	23.5	27.5	26.5	27.0	26.5	25.0	24.5
23	10.5	10.0	18.5	18.5	24.0	23.5	28.0	27.5	27.0	26.0	25.0	24.0
24	11.0	10.0	18.0	17.5	24.0	23.5	28.0	27.5	26.5	25.5	24.0	23.5
25	11.0	11.0	18.0	17.5	24.0	23.5	28.0	27.5	26.5	25.5	23.5	23.0
26	11.0	11.0	19.0	18.0	24.5	23.5	27.5	27.0	27.0	26.0	23.0	22.5
27	12.0	11.0	20.0	19.0	24.5	24.0	27.0	26.5	27.0	26.5	23.5	22.0
28	13.0	12.0	21.0	20.0	25.5	24.5	27.0	26.5	27.0	24.0	22.0	21.0
29	13.5	13.0	21.5	21.0	25.0	24.5	27.0	26.5	25.5	24.5	22.0	20.5
30	14.5	13.5	22.5	21.5	25.0	24.5	26.5	26.0	25.5	24.5	21.0	20.5
31	---	---	23.0	22.0	---	---	26.0	25.5	24.5	23.0	---	---
MONTH	14.5	7.5	23.0	12.0	25.5	20.0	28.0	21.0	27.5	23.0	26.5	20.5
YEAR	28.0	.0										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCTOBER MAX	OCTOBER MIN	NOVEMBER MAX	NOVEMBER MIN	DECEMBER MAX	DECEMBER MIN	JANUARY MAX	JANUARY MIN	FEBRUARY MAX	FEBRUARY MIN	MARCH MAX	MARCH MIN
1	---	---	9.8	9.1	12.7	12.0	---	---	13.7	12.9	13.5	13.4
2	---	---	9.6	8.6	12.0	11.1	---	---	13.6	13.5	13.4	13.4
3	---	---	9.5	8.6	11.9	11.1	---	---	13.7	13.5	13.4	13.3
4	---	---	9.5	9.3	12.0	11.5	---	---	13.6	13.5	13.5	13.4
5	---	---	9.7	9.2	12.0	11.7	---	---	13.7	13.5	---	---
6	---	---	9.6	8.7	12.4	11.6	---	---	13.8	13.7	13.5	13.5
7	---	---	8.8	8.5	13.9	12.0	---	---	13.9	13.6	13.5	13.4
8	---	---	8.7	8.5	14.2	13.8	---	---	13.9	13.8	13.4	13.3
9	---	---	9.1	8.5	14.5	14.1	---	---	13.8	13.7	13.3	13.2
10	---	---	9.1	8.9	14.8	14.3	---	---	13.8	13.6	---	---
11	---	---	9.6	8.9	14.7	14.3	---	---	13.8	13.5	---	---
12	---	---	---	---	14.6	14.1	---	---	13.8	13.6	---	---
13	---	---	---	---	14.3	14.0	---	---	13.7	13.6	13.6	13.5
14	---	---	---	---	14.2	13.9	---	---	13.6	13.6	13.7	12.2
15	---	---	---	---	14.1	13.6	---	---	13.7	13.5	13.5	12.1
16	---	---	---	---	13.7	13.4	13.5	13.4	13.7	13.4	13.8	13.4
17	---	---	---	---	13.8	12.9	13.5	13.3	13.5	13.4	13.7	13.4
18	---	---	---	---	13.0	12.7	13.5	13.3	13.7	13.4	---	---
19	---	---	---	---	13.8	12.7	13.5	13.2	13.7	13.6	---	---
20	---	---	---	---	13.0	12.6	13.5	13.3	13.7	13.5	13.5	13.0
21	---	---	12.0	11.7	13.6	12.8	13.6	13.2	13.7	13.6	13.2	12.7
22	---	---	12.2	11.8	13.4	13.0	13.8	13.5	13.8	13.6	12.9	12.6
23	---	---	13.0	11.1	13.4	13.1	13.9	13.4	13.7	13.6	12.8	12.5
24	---	---	11.4	10.8	13.3	12.7	13.9	13.0	13.8	13.5	12.5	12.4
25	---	---	11.4	10.5	13.1	12.8	13.4	13.0	13.8	13.5	---	---
26	---	---	11.8	11.2	13.5	12.8	13.6	12.3	13.5	13.4	---	---
27	9.6	8.2	12.3	11.6	13.6	13.2	13.2	12.6	13.5	13.4	---	---
28	9.7	9.3	12.7	12.1	13.6	12.9	13.6	12.8	13.5	13.4	---	---
29	9.5	9.2	12.9	12.5	13.7	12.9	13.5	12.8	---	---	---	---
30	9.5	9.1	13.2	12.3	---	---	13.4	12.8	---	---	12.4	12.3
31	9.8	9.2	---	---	---	---	13.4	13.0	---	---	12.4	12.2
MONTH	9.8	8.2	13.2	8.5	14.8	11.1	13.9	12.3	13.9	12.9	13.8	12.1
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1	12.2	12.0	11.4	10.7	---	---	7.4	7.2	8.2	6.7	7.3	6.9
2	12.2	12.0	11.1	10.6	---	---	7.3	7.2	10.0	7.3	7.4	7.2
3	12.3	12.2	11.4	10.4	---	---	7.6	7.2	7.7	7.2	7.4	7.2
4	---	---	10.7	10.0	---	---	8.1	7.5	8.0	7.2	7.3	6.9
5	---	---	10.4	10.0	---	---	8.2	8.0	7.8	6.8	6.9	6.7
6	---	---	10.8	10.4	9.0	8.5	8.2	7.9	6.9	6.5	7.6	6.6
7	---	---	10.9	10.7	8.9	8.5	7.9	7.7	7.4	6.5	7.9	7.0
8	---	---	10.7	10.5	8.6	7.9	7.7	7.5	7.7	6.9	7.8	6.9
9	---	---	10.5	10.2	8.5	8.1	7.5	7.4	8.2	7.0	7.7	6.6
10	---	---	10.3	10.1	8.7	8.4	7.7	7.3	8.4	7.5	7.8	6.0
11	11.4	11.3	10.3	10.3	8.8	8.6	8.4	7.4	8.0	7.3	8.2	5.8
12	11.4	11.3	10.2	9.9	8.6	8.4	9.6	7.8	7.4	7.0	5.8	5.3
13	11.3	11.1	9.9	9.7	8.6	8.4	9.4	8.3	7.3	7.1	5.4	4.6
14	11.2	11.0	10.1	9.8	8.7	8.4	9.2	7.9	7.2	7.0	5.5	4.3
15	11.3	11.0	10.3	10.1	8.7	8.5	9.7	8.4	7.1	6.7	5.5	4.6
16	11.3	11.1	10.4	10.3	8.6	8.4	9.3	7.3	6.8	6.5	5.6	4.4
17	11.4	11.1	10.5	10.4	8.7	8.4	9.5	7.3	7.3	6.4	5.7	4.5
18	11.2	10.8	10.5	10.4	8.4	8.0	9.5	8.3	8.0	6.6	6.4	5.4
19	11.1	10.8	10.3	10.1	8.2	8.0	9.7	8.3	9.1	6.9	6.7	5.2
20	11.0	10.8	10.0	9.6	8.0	7.8	9.7	8.0	7.6	6.5	6.9	5.4
21	11.3	11.0	9.6	9.5	8.0	7.9	10.0	8.1	7.1	6.1	7.1	5.7
22	11.7	11.2	9.5	9.2	7.9	7.8	10.0	7.9	7.4	6.0	7.5	6.4
23	11.6	11.5	9.5	9.4	7.9	7.7	9.6	7.7	7.5	6.2	7.3	6.1
24	11.8	11.5	9.7	9.3	7.8	7.7	8.6	6.5	8.0	6.1	7.0	5.7
25	11.7	11.5	9.9	9.6	7.8	7.7	7.0	6.3	8.7	6.2	7.0	5.6
26	11.6	11.4	9.7	9.4	8.0	7.6	7.1	6.1	8.4	6.6	9.3	5.9
27	11.6	11.2	9.5	9.2	7.8	7.4	7.8	6.3	7.3	6.4	9.9	6.8
28	11.5	11.3	9.3	9.1	7.6	7.3	8.3	7.2	6.6	5.8	7.7	6.5
29	11.3	11.0	9.4	9.0	7.5	7.4	8.6	7.2	6.2	5.9	10.4	6.9
30	11.2	10.8	9.3	8.9	7.5	7.4	7.7	6.7	6.2	5.9	9.6	7.4
31	---	---	9.0	8.7	---	---	7.4	6.7	7.0	6.1	---	---
MONTH	12.3	10.8	11.4	8.7	9.0	7.3	10.0	6.1	10.0	5.8	10.4	4.3
YEAR	14.8	4.3										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

RESERVOIRS IN MUSKINGUM RIVER BASIN, OH

03119500 BOLIVAR RESERVOIR NEAR BOLIVAR.--Lat 40°38'56", long 81°25'57", Tuscarawas County, Hydrologic Unit 05040001, in gage house of dam on Sandy Creek, 1.1 mi (1.8 km) east of Bolivar. DRAINAGE AREA, 504 mi² (1,305 km²). PERIOD OF RECORD, June 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 895.0 ft (272.80 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD.

Reservoir is formed by earthfill dam completed Nov. 15, 1937. Usable capacity 149,500 acre-ft (184 hm³) between elevations 895.0 ft (272.80 m) (lowest outlet), and 962.0 ft (293.22 m) (crest of spillway). Dead storage below elevation 895.0 ft (272.80 m), 113 acre-ft (139,000 m³). Figures given herein represent usable contents. Reservoir is used for flood control only. There are no gates on spillway and all regulation is done by gates in conduits through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 63,320 acre-ft (78.1 hm³) Jan. 26, 1959, elevation, 944.01 ft (287.734 m); minimum, 62 acre-ft (76,400 m³) Oct. 9, 1939, elevation, 896.30 ft (273.192 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 49,500 acre-ft (61.0 hm³) Mar. 29, elevation, 939.54 ft (286.372 m); minimum, 124 acre-ft (153,000 m³) Sept. 11, elevation, 897.23 ft (273.476 m).

03120000 LEESVILLE LAKE NEAR LEESVILLE.--Lat 40°28'15", long 81°11'40", in N 1/2 sec. 36, T.13 N., R.6 W., Carroll County, Hydrologic Unit 05040001, in gate house of dam on McGuire Creek, 1.4 mi (2.3 km) northeast of Leesville. DRAINAGE AREA, 48.3 mi² (125 km²). PERIOD OF RECORD, April 1938 to current year. Prior to October 1971 published as Leesville Reservoir. Month-end contents prior to September 1939, published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 928.0 ft (282.85 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD.

Lake is formed by earthfill dam completed Oct. 22, 1937. Usable capacity 37,070 acre-ft (45.7 hm³) between elevations 928.0 ft (282.85 m) (lowest outlet), and 977.5 ft (297.94 m) (crest of spillway), of which 19,170 acre-ft (23.6 hm³) is in the conservation pool. Dead storage below elevation 928.0 ft (282.85 m), 320 acre-ft (406,000 m³). Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in conduit through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 26,430 acre-ft (32.6 hm³) Apr. 17, 1948, elevation, 969.59 ft (295.531 m); minimum, 41 acre-ft (50,600 m³) Oct. 9-25, 1939, elevation, 928.38 ft (282.970 m), but may have been less during period Sept. 18-24, 1940.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 20,310 acre-ft (25.0 hm³) Mar. 29, 30, elevation, 964.13 ft (293.867 m); minimum, 13,710 acre-ft (16.9 hm³) Mar. 3, 4, elevation, 957.05 ft (291.709 m).

03121000 ATWOOD LAKE NEAR NEW CUMBERLAND.--Lat 40°31'34", long 81°17'09", in SE 1/4 sec. 28, T.15 N., R.7 W., Tuscarawas County, Hydrologic Unit 05040001, in gate house of dam on Indian Fork, 1.5 mi (2.4 km) southeast of New Cumberland. DRAINAGE AREA, 69.9 mi² (181 km²). PERIOD OF RECORD, June 1938 to current year. Prior to October 1971 published as Atwood Reservoir. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 890.0 ft (271.27 m) National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD. Prior to Oct. 11, 1938, nonrecording gage at same site and datum.

Lake is formed by earthfill dam completed Sept. 23, 1937. Usable capacity 49,690 acre-ft (61.3 hm³) between elevations 890.0 ft (271.27 m) (lowest outlet), and 941.0 ft (286.82 m) (crest of spillway), of which 23,590 acre-ft (29.1 hm³) is in the conservation pool. Dead storage below elevation 890.0 ft (271.27 m), 8 acre-ft (9,860 m³). Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in conduits through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 35,210 acre-ft (43.4 hm³) Feb. 8, 1952, elevation, 938.51 ft (286.039 m); minimum, 2.2 acre-ft (2,710 m³) Jan. 8, 9, 1940, elevation, 890.36 ft (271.382 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 27,880 acre-ft (34.3 hm³) June 11, elevation, 930.58 ft (283.641 m); minimum, 15,820 acre-ft (19.5 hm³) Feb. 8, 9, elevation, 922.36 ft (281.135 m).

03122000 DOVER LAKE NEAR DOVER.--Lat 40°33'29", long 81°28'46", in SW 1/4 sec. 6, T.9 N., R.1 W., Tuscarawas County, Hydrologic Unit 05040001, in gate house of dam on Tuscarawas River, 4.2 mi (6.8 km) northeast of Dover. DRAINAGE AREA, 1,404 mi² (3,636 km²). PERIOD OF RECORD, June 1938 to current year. Prior to October 1971 published as Dover Reservoir. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 858.0 ft (261.52 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD. Prior to Sept. 22, 1938, nonrecording gage at same site and datum.

Lake is formed by concrete dam completed Nov. 29, 1937. Usable capacity 203,000 acre-ft (250 hm³) between elevations 862.0 ft (262.74 m) (lowest outlet), and 916.0 ft (279.20 m) (crest of spillway), of which 1,000 acre-ft (1.23 hm³) is in conservation pool. No dead storage. Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in conduits through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 109,000 acre-ft (134 hm³) July 12, 1969, elevation, 905.00 ft (275.844 m); no contents several days during most years.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 33,440 acre-ft (41.2 hm³) Mar. 18, elevation, 891.55 ft (271.744 m); minimum, no contents Sept. 29, 30.

03123500 BEACH CITY LAKE NEAR BEACH CITY.--Lat 40°38'06", long 81°33'30", in T.10 N., R.3 W., Tuscarawas County, Hydrologic Unit 05040001, in gate house of dam on Sugar Creek, 1.6 mi (2.6 km) southeast of Beach City. DRAINAGE AREA, 300 mi² (777 km²). PERIOD OF RECORD, June 1938 to current year. Prior to October 1971 published as Beach City Reservoir. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 931.0 ft (283.77 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD. Prior to Feb. 4, 1939, nonrecording gage at same site and datum.

Lake is formed by earthfill dam completed Aug. 13, 1937. Usable capacity 71,650 acre-ft (88.3 hm³) between elevations 931.0 ft (283.77 m) (lowest outlet), and 976.5 ft (297.64 m) (crest of spillway), of which 1,700 acre-ft (2.10 hm³) is in conservation pool. No dead storage. Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in conduits through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 70,120 acre-ft (86.5 hm³) July 6, 1969, elevation, 976.25 ft (297.561 m); minimum, 1.1 acre-ft (1,360 m³) several days in September and October 1939, elevation, 931.60 ft (283.952 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 33,560 acre-ft (41.4 hm³) Mar. 17, elevation, 968.80 ft (295.168 m); minimum, 1,930 acre-ft (2.38 hm³) Sept. 11, 12, elevation, 948.49 ft (289.100 m).

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03125500 PIEDMONT LAKE AT PIEDMONT.--Lat 40°11'31", long 81°12'57", in SE 1/4 sec. 35, T.10 N., R.6 W., Harrison County, Hydrologic Unit 05040001, in gate house of dam on Stillwater Creek, 0.4 mi (0.6 km) west of Piedmont. DRAINAGE AREA, 85.9 mi² (222 km²). PERIOD OF RECORD, May 1938 to current year. Prior to October 1971 published as Piedmont Reservoir. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 881.75 ft (268.757 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD.

Lake is formed by earthfill dam completed May 22, 1937. Usable capacity 68,990 acre-ft (80.1 hm³) between elevations 881.75 ft (lowest outlet), and 924.6 ft (281.82 m) (crest of spillway), of which 33,500 acre-ft (41.3 hm³) is in the conservation pool. Dead storage below elevation 881.75 ft (268.757 m), 71 acre-ft (87,500 m³). Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in tunnel through abutment of dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 46,650 acre-ft (57.5 hm³) June 11, 12, 1997, elevation, 918.33 ft (279.957 m); minimum, 26 acre-ft (32,100 m³) Sept. 18-25, 1939, elevation, 882.25 ft (268.910 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 38,110 acre-ft (47.0 hm³) June 12, elevation, 914.98 ft (278.886 m); minimum, 24,840 acre-ft (30.6 hm³) Jan. 15, elevation, 908.90 ft (277.033 m).

03126500 CLENDENING LAKE NEAR TIPPECANOE.--Lat 40°16'10", long 81°16'43", in NW 1/4 sec. 16, T.12 N., R.7 W., Harrison County, Hydrologic Unit 05040001, in gate house of dam on Brushy Fork, 0.6 mi (1.0 km) east of Tippecanoe. DRAINAGE AREA, 69.3 mi² (179 km²). PERIOD OF RECORD, June 1939 to current year. Prior to October 1971 published as Clendening Reservoir. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 862.00 ft (262.738 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD. Prior to July 11, 1938, nonrecording gage at same site and datum.

Lake is formed by earthfill dam completed Nov. 1, 1937. Usable capacity 53,970 acre-ft (66.5 hm³) between elevations 862.0 ft (262.74 m) (lowest outlet), and 910.5 ft (277.52 m) (crest of spillway), of which 26,470 acre-ft (32.6 hm³) is in the conservation pool. Dead storage below elevation 862.0 ft (262.74 m) 27 acre-ft (33,300 m³). Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in tunnel through abutment of dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 38,060 acre-ft (46.9 hm³) Feb. 7, 1952, elevation, 903.85 ft (275.493 m); minimum, 5.9 acre-ft (7,270 m³) Nov. 8, 1938, elevation, 862.33 ft (262.838 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 29,740 acre-ft (36.7 hm³) June 10, 11, elevation, 899.72 ft (274.235 m); minimum, 18,430 acre-ft (22.7 hm³) Dec. 23, elevation, 892.97 ft (272.177 m).

03128000 TAPPAN LAKE NEAR TAPPAN.--Lat 40°21'24", long 81°13'38", in NW 1/4 sec. 8, T.13 N., R.7 W., Harrison County, Hydrologic Unit 05040001, in gate house of dam on Little Stillwater Creek, 0.9 mi (1.4 km) west of Tappan. DRAINAGE AREA,--71.1 mi² (184 km²). PERIOD OF RECORD, May 1938 to current year. Prior to October 1971 published as Tappan Reservoir. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 870.0 ft (265.18 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD.

Lake is formed by earthfill dam completed Oct. 24, 1936. Usable capacity 61,500 acre-ft (75.8 hm³) between elevations 870.0 ft (265.18 m) (lowest outlet), and 909.0 ft (277.06 m) (crest of spillway), of which 35,070 acre-ft (43.2 hm³) is in conservation pool. Dead storage below elevation 870.0 ft (265.18 m), 46 acre-ft (56,700 m³). Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in tunnel through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 48,840 acre-ft (59.7 hm³) Feb. 5, 6, 1952, elevation, 904.53 ft (275.701 m); no contents Sept. 29, 1939.

EXTREMES FOR CURRENT YEAR: Maximum contents, 37,760 acre-ft (46.6 hm³) May 2, elevation, 900.83 ft (274.448 m); minimum, 22,670 acre-ft (28.0 hm³) Dec. 27, 28, elevation, 893.48 ft (272.333 m).

03129500 CHARLES MILL LAKE NEAR MIFFLIN.--Lat 40°44'26", long 82°21'47", in NE 1/4 sec. 35, T.23 N., R.17 W., Ashland County, Hydrologic Unit 05040002, in gate house of dam on Black Fork, 2.5 mi (4.0 km) south of Mifflin. DRAINAGE AREA, 215 mi² (557 km²). PERIOD OF RECORD, April 1938 to current year. Prior to October 1971 published as Charles Mill Reservoir. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 987.0 ft (300.84 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD.

Lake is formed by earthfill dam completed Aug. 17, 1936. Usable capacity 87,690 acre-ft (108 hm³) between elevations 987.0 ft (300.84 m) (lowest outlet), and 1,020.0 ft (310.90 m) (crest of spillway), of which 7,090 acre-ft (8.74 hm³) is in the conservation pool. Dead storage below elevation 987.0 ft (300.84 m), 310 acre-ft (382,000 m³). Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in conduits through dam or through bypass gate around conservation weir. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 53,480 acre-ft (65.9 hm³) Jan. 25, 1959, elevation, 1,013.53 ft (308.924 m); minimum, 733 acre-ft (904,000 m³) Dec. 24, 1965, elevation, 989.89 ft (301.718 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 34,140 acre-ft (42.1 hm³) Mar. 27, elevation, 1,008.70 ft (307.452 m); minimum, 3,030 acre-ft (3.74 hm³) Mar. 10, 11, elevation, 993.49 ft (302.816 m).

03133000 PLEASANT HILL LAKE NEAR PERRYSVILLE.--Lat 40°37'26", long 82°19'33", in NE 1/4 sec. 7, T.19 N., R.16 W., Ashland County, Hydrologic Unit 05040002, in gate house of dam on Clear Fork, 2.5 mi (4.0 km) south of Perrysville. DRAINAGE AREA, 197 mi² (510 km²). PERIOD OF RECORD, May 1938 to current year. Prior to October 1971 published as Pleasant Hill Reservoir. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 971.75 ft (296.189 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD.

Lake is formed by earthfill dam completed Feb. 1, 1939. Usable capacity 97,680 acre-ft (120 hm³) between elevations 971.75 ft (296.189 m) (lowest outlet), and 1,065.0 ft (324.61 m) (crest of spillway), of which 13,510 acre-ft (16.7 hm³) is in the conservation pool. Dead storage below elevation 971.75 ft (296.189 m), 12 acre-ft (14,800 m³). Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in tunnel through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 43,530 acre-ft (53.7 hm³) Jan. 23, 1959, elevation, 1,044.21 ft (318.248 m); minimum, 74 acre-ft (91,200 m³) May 8, 1938, elevation, 976.63 ft (297.677 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 22,880 acre-ft (27.7 hm³) Mar. 27, 28, elevation, 1,028.08 ft (313.451 m); minimum, 7,710 acre-ft (9.51 hm³) Feb. 21, elevation, 1,011.97 ft (308.548 m).

03138500 MOHICANVILLE RESERVOIR NEAR MOHICANVILLE.--Lat 40°43'28", long 82°09'08", in SE 1/4 sec. 38, T.21 N., R.15 W., Ashland County, Hydrologic Unit 05040002, in gate house of dam on Lake Fork, 2 mi (3 km) east of Mohicanville. DRAINAGE AREA, 271 mi² (702 km²). PERIOD OF RECORD, May 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 932.0 ft (284.07 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD.

Reservoir is formed by earthfill dam completed Dec. 24, 1936. Usable capacity 102,000 acre-ft (126 hm³) between elevations 932.0 ft (284.07 m) (lowest outlet), and 963.0 ft (293.52 m) (crest of spillway). Dead storage below elevation 932.0 ft (284.07 m), 18 acre-ft (22,200 m³). Figures given herein represent usable contents. Reservoir is used for flood control only. There are no gates on spillway and all regulation is done by gates in conduits through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 36,330 acre-ft (119 hm³) July 7, 1969, elevation, 962.35 ft (293.324 m); minimum, 9.9 acre-ft (12,200 m³) several days in 1981, 1984, 1985; minimum elevation, 932.38 ft (284.189 m) several days in August, September, October, 1981.

EXTREMES FOR CURRENT YEAR: Maximum contents, 47,810 acre-ft (58.9 hm³) Mar. 28, elevation, 955.73 ft (291.297 m); minimum, 37 acre-ft (45,600 m³) several days in September, elevation, 933.27 ft (284.461 m).

03136300 NORTH BRANCH KOKOSING RIVER LAKE NEAR FREDERICKTOWN.--Lat 40°30'24", long 82°34'36", in SW 1/4 sec. 19, T.8 N., R.14 W., Knox County, Hydrologic Unit 05040003, at dam on North Branch Kokosing River, 2.5 mi (4.0 km) northwest of Fredericktown, and 3.0 mi (4.8 km) upstream from East Branch Kokosing River. DRAINAGE AREA, 44.5 mi² (115 km²). PERIOD OF RECORD, July 1973 to current year. GAGE, Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. (levels by Corps of Engineers).

Lake is formed by earthfill dam, with uncontrolled saddle spillway; storage began June 1972. Usable capacity, 940 acre-ft (1.16 hm³) between elevation, 1,108.0 ft (337.72 m) (invert of lowest outlet), and 1,121.0 ft (341.68 m) (uncontrolled entrance to outlet works). Dead storage below elevation, 1,108.0 ft (337.72 m), 103 acre-ft (127,000 m³). Additional flood retention capacity 13,840 acre-ft (17.1 hm³) between 1,121.0 ft (341.68 m) and 1,146.0 ft (349.30 m) (crest of spillway). Figures given herein represent usable contents. Reservoir is used for flood control, recreation, and conservation. Lowest outlet is normally closed to maintain a pool elevation of 1,121.0 ft (341.68 m). Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 5,620 acre-ft (6.93 hm³) Feb. 24, 1975; elevation, 1,134.98 ft (345.942 m); minimum, 761 acre-ft (0.94 hm³) Mar. 28, 1978, elevation, 1,119.72 ft (341.291 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 1,660 acre-ft (2.05 hm³) Dec. 14, elevation, 1,124.68 ft (342.803 m); minimum, 761 acre-ft (0.94 hm³) Mar. 28, elevation, 1,119.72 ft (341.291 m).

03138000 MOHAWK RESERVOIR NEAR WELLIE.--Lat 40°21'12", long 82°05'12", in SW 1/4 sec. 6, T.6 N., R.9 W., Coshocton County, Hydrologic Unit 05040003, in gate house of dam on Walhonding River, 1.5 mi (2.4 km) northwest of Wellie. DRAINAGE AREA, 1,504 mi² (3,895 km²). PERIOD OF RECORD, April 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 799.2 ft (243.60 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD.

Reservoir is formed by earthfill dam completed Sept. 22, 1937. Usable capacity 284,900 acre-ft (351 hm³) between elevations 799.2 ft (243.60 m) (lowest outlet), and 890.0 ft (271.27 m) (crest of spillway). Dead storage below elevation 799.2 ft (243.60 m), 59 acre-ft (72,700 m³). Figures given herein represent usable contents. Reservoir is used for flood control only. There are no gates on spillway and all regulation is done by gates in tunnels through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 176,000 acre-ft (217 hm³) Jan. 25, 1959, elevation, 873.98 ft (266.377 m); minimum, 44 acre-ft (54,300 m³) Sept. 21, Oct. 4, 1955; minimum elevation, 800.35 ft (243.947 m) Oct. 4, 1955, from graph based on gage readings.

EXTREMES FOR CURRENT YEAR: Maximum contents, 71,210 acre-ft (87.8 hm³) Mar. 29, elevation, 852.03 ft (259.699 m); minimum, 64 acre-ft (78,900 m³) Sept. 28, 29, 30, elevation, 800.80 ft (244.088 m).

03141000 SENECAVILLE LAKE NEAR SENECAVILLE.--Lat 39°55'31", long 81°26'06", Guernsey County, Hydrologic Unit 05040005, in gate house of dam on Seneca Fork, 1.5 mi (2.4 km) southeast of Senecaville. DRAINAGE AREA, 118 mi² (306 km²). PERIOD OF RECORD, June 1938 to current year. Prior to October 1971 published as Senecaville Reservoir. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 812.05 ft (247.513 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations above mean sea level. Prior to Sept. 21, 1938, nonrecording gage at same site and datum.

Lake is formed by earthfill dam completed May 18, 1937. Usable capacity 86,340 acre-ft (106 hm³) between elevations 812.05 ft (247.513 m) (lowest outlet), and 842.5 ft (256.79 m) (top of taintor gates), of which 41,300 acre-ft (50.9 hm³) is in conservation pool. Usable capacity at elevation 831.0 ft (253.29 m) (crest of spillway), 37,180 acre-ft (45.8 hm³). Dead storage below elevation 812.05 ft (247.513 m), 1,950 acre-ft (2.40 hm³). Figures given herein represent usable contents. Taintor gates normally remain closed to maintain conservation pool at elevation 832.2 ft (253.65 m) and outflow is controlled by gates in conduits through dam. Lake is used for flood control and conservation. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 61,430 acre-ft (75.7 hm³) Mar. 24, 1945, elevation, 837.27 ft (255.200 m); minimum, 360 acre-ft (444,000 m³) Oct. 22, 23, 1939, elevation, 812.53 ft (247.659 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 47,510 acre-ft (58.6 hm³) Mar. 29, 30, elevation, 833.88 ft (254.167 m); minimum, 28,110 acre-ft (34.7 hm³) Dec. 27, 28, elevation, 828.07 ft (252.396 m).

03142290 SALT FORK LAKE NEAR CAMBRIDGE.--Lat 40°06'15", long 81°33'15", in T.3 N., R.3 W., Guernsey County, Hydrologic Unit 05040005, at outlet works near left end of dam on Salt Fork, 0.8 mi (1.3 km) upstream from mouth, 5.0 mi (8.0 km) north of Cambridge, and 3.5 mi (5.6 km) south of Kimbolton. DRAINAGE AREA, 159 mi² (412 km²). PERIOD OF RECORD, September 1968 to current year. GAGE, water-stage recorder. Datum of gage is 700.00 ft (213.360 m) National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD.

Reservoir is formed by earthfill dam with concrete morning-glory spillway and emergency spillway cut in natural rock; storage began Dec. 30, 1967. Usable capacity, 41,950 acre-ft (51.7 hm³) between elevations 772.5 ft (235.46 m) (invert of lowest outlet), and 800.0 ft (243.84 m) (crest of morning-glory spillway). Dead storage below elevation 772.5 ft (235.46 m), 1,250 acre-ft (1.54 hm³). Additional flood-retention capacity, 28,600 acre-ft (35.3 hm³) between elevations 800.0 ft (243.84 m) and 808.0 ft (246.28 m) (crest of emergency spillway). Figures given herein represent usable contents. There are no gates on spillway and all regulation is done by conduits through dam. Reservoir is used for recreation, flood control, and future municipal supply. Capacity curve furnished by State Department of Natural Resources.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 60,500 acre-ft (74.6 hm³) Feb. 24, 1975, elevation, 805.46 ft (245.504 m); minimum, 12,200 acre-ft (15.0 hm³) Oct. 17, 1968, elevation, 786.53 ft (239.734 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 56,480 acre-ft (69.6 hm³) Mar. 16, elevation, 804.37 ft (245.172 m); minimum, 42,380 acre-ft (52.3 hm³) Sept. 26, elevation, 800.14 ft (243.883 m).

03143000 WILLS CREEK LAKE NEAR WILLS CREEK.--Lat 40°09'25", long 81°51'00", in SE 1/4 sec. 23, T.4 N., R.6 W., Coshocton County, Hydrologic Unit 05040005, in gate house of dam on Wills Creek, 1.3 mi (2.1 km) south of village of Wills Creek, and 4.0 mi (6.4 km) southwest of Conesville. DRAINAGE AREA, 862 mi² (2,181 km²). PERIOD OF RECORD, April 1938 to current year. Prior to October 1971 published as Wills Creek Reservoir. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 733.0 ft (223.42 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD.

Lake is formed by earthfill dam completed Oct. 13, 1937. Usable capacity, 198,800 acre-ft (260 hm³) between elevations 733.0 ft (223.42 m) (lowest outlet), and 779.0 ft (237.44 m) (crest of spillway), of which 8,420 acre-ft (5.85 hm³) is in conservation pool. Dead storage below elevation 733.0 ft (223.42 m), 1,580 acre-ft (1.95 hm³). Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in conduits through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 169,700 acre-ft (209 hm³) Mar. 15, 1968, elevation, 776.71 ft (236.747 m); minimum, 300 acre-ft (370,000 m³) Oct. 22, 23, 1939, elevation, 734.10 ft (223.764 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 65,270 acre-ft (80.5 hm³) Mar. 28, elevation, 763.10 ft (232.593 m); minimum, 3,990 acre-ft (4.92 hm³) Sept. 30, elevation, 741.49 ft (226.006 m).

03147300 DILLON LAKE NEAR DILLON FALLS.--Lat 39°59'32", long 82°04'57", in T.1 N., R.8 W., Muskingum County, Hydrologic Unit 05040006, in outlet works of control tower at dam on Licking River, 2 mi (3 km) northwest of Dillon Falls, and 5.8 mi (9.3 km) upstream from mouth at Zanesville. DRAINAGE AREA, 742 mi² (1,922 km²). PERIOD OF RECORD, January 1961 to current year. Prior to October 1971 published as Dillon Reservoir. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Lake formed by earth dam with concrete spillway; closure of dam made July 29, 1959; storage to maintain conservation pool began Dec. 17, 1960. Usable capacity 274,000 acre-ft (338 hm³) between elevations 704.0 ft (214.58 m) (lowest outlet), and 790.0 ft (240.79 m) (crest of spillway), of which 13,170 acre-ft (16.2 hm³) is in conservation pool. Dead storage below elevation 704.0 ft (214.58 m), 30 acre-ft (37,000 m³). Figures given herein represent usable contents. Lake is used primarily for flood control. There are no gates on spillway and all regulation is done by gates in conduits through abutment of dam. Capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 142,600 acre-ft (176 hm³) Mar. 13, 1968, elevation, 772.88 ft (235.574 m); minimum observed, 208 acre-ft (256,000 m³) Mar. 31, 1961, elevation, 710.94 ft (216.694 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 105,700 acre-ft (130 hm³) Mar. 28, elevation, 765.32 ft (233.270 m); minimum, 12,500 acre-ft (15.4 hm³) Feb. 26, 27; elevation, 733.52 ft (223.577 m).

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
	03119500 BOLIVAR RESERVOIR			03120000 LEESVILLE LAKE			03121000 ATWOOD LAKE		
Sept. 30.....	898.58	247	-	962.74	18910	-	927.79	23280	-
Oct. 31.....	898.30	218	-29	962.71	18880	-30	927.76	23230	-50
Nov. 30.....	902.00	768	+550	958.74	15190	-3690	925.08	19300	-3930
Dec. 31.....	900.40	483	-285	957.78	14330	-860	922.47	15960	-3340
CAL YR 1977	-	-	+313	-	-	+2960	-	-	-80
Jan. 31.....	904.50	1390	+907	958.05	14570	+240	924.08	18000	+2040
Feb. 28.....	899.86	402	-988	957.10	13760	-810	922.63	16150	-1850
Mar. 31.....	936.14	40350	+39948	964.02	20190	+6430	929.66	26250	+10100
Apr. 30.....	899.24	322	-40028	962.91	19080	-1110	927.97	23530	-2720
May 31.....	900.45	491	+169	962.90	19070	-10	927.96	23550	+20
June 30.....	898.57	246	-245	962.82	18990	-80	928.02	23620	+70
July 31.....	898.12	199	-47	962.73	18900	-90	927.76	23230	-390
Aug. 31.....	900.75	460	+261	962.80	18970	+70	927.93	23490	+260
Sept. 30.....	897.59	153	-307	962.57	18740	-230	927.75	23220	-270
WTR YR 1978	-	-	-94	-	-	-170	-	-	-60
	03122000 DOVER LAKE			03123500 BEACH CITY LAKE			03125500 PIEDMONT LAKE		
Sept. 30.....	866.88	24	-	948.82	2080	-	912.71	32860	-
Oct. 31.....	866.02	5.4	-18.6	948.67	2010	-70	912.42	32660	-200
Nov. 30.....	868.64	67	+61.6	949.88	2640	+630	910.23	27500	-5160
Dec. 31.....	868.21	74	+7.0	949.32	2330	-310	909.07	25170	-2330
CAL YR 1977	-	-	+57	-	-	+340	-	-	+2850
Jan. 31.....	869.47	144	+70	950.08	2750	+420	910.23	27500	+2330
Feb. 28.....	865.87	4.4	-139.6	948.84	2090	-660	909.07	25170	-2330
Mar. 31.....	881.00	6540	+6535.6	960.67	14440	+12350	914.29	36490	+11320
Apr. 30.....	866.99	27	-6513	949.28	2310	-12130	913.10	33730	-2760
May 31.....	869.59	152	+125	949.86	2620	+310	913.16	33870	+140
June 30.....	866.71	21	-131	949.11	2220	-400	914.24	36370	+2500
July 31.....	865.18	0.9	-20.1	948.60	1980	-240	912.75	32950	-3420
Aug. 31.....	867.86	60	+59.1	949.57	2470	+490	912.80	33060	+110
Sept. 30.....	865.11	0.6	-59.4	948.56	1960	-510	912.52	32440	-620
WTR YR 1974	-	-	-23.4	-	-	-120	-	-	-420

MUSKINGUM RIVER BASIN

RESERVOIRS IN MUSKINGUM RIVER BASIN, OH--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
	03126500 CLENDENING LAKE			03128000 TAPPAN LAKE			03129500 CHARLES MILL LAKE		
Sept. 30.....	897.69	25950	-	899.06	34500	-	997.16	7310	-
Oct. 31.....	894.02	19900	-6050	895.96	27670	-6830	997.14	7290	-20
Nov. 30.....	893.10	18610	-1290	894.05	23750	-3920	996.78	6800	-490
Dec. 31.....	893.03	18520	-90	893.57	22840	-910	998.59	9380	+2580
CAL YR 1977	-	-	+230	-	-	-1330	-	-	+6840
Jan. 31.....	894.57	20780	+2260	893.74	23160	+320	997.74	8130	-1250
Feb. 28.....	893.23	18800	-1980	894.31	24270	+1110	994.53	4070	-4060
Mar. 31.....	898.92	28220	+9420	899.69	36010	+11740	1007.37	29670	+25600
Apr. 30.....	898.03	26530	-1690	900.39	37690	+1680	997.54	7850	-21820
May 31.....	898.07	26610	+80	899.38	35270	-2420	997.56	7870	+20
June 30.....	898.13	26720	+110	899.43	35390	+120	997.32	7540	-330
July 31.....	897.82	26170	-550	899.17	34760	-630	997.09	7220	-320
Aug. 31.....	898.07	26610	+440	899.38	35270	+510	997.02	7120	-100
Sept. 30.....	897.70	25960	-650	899.02	34400	-870	996.96	7040	-80
WTR YR 1978	-	-	+10	-	-	-100	-	-	-270
	03133000 PLEASANT HILL LAKE			03134500 MOHICANVILLE RESERVOIR			03136300 N.B. KOKOSING RIVER LAKE		
Sept. 30.....	1019.44	13050	-	933.42	42	-	1121.25	981	+6
Oct. 31.....	1019.44	13050	0	933.44	43	+1	1121.31	991	+10
Nov. 30.....	1019.73	13290	+240	935.21	134	+91	1121.91	1090	+99
Dec. 31.....	1014.95	9640	-3650	945.84	7440	+7306	1121.75	1060	-30
CAL YR 1977	-	-	+1580	-	-	+7402	-	-	+280
Jan. 31.....	1018.30	12130	+2490	937.69	328	-7112	1121.95	1100	+40
Feb. 28.....	1012.50	8040	-4090	934.51	93	-235	1121.45	1010	-90
Mar. 31.....	1026.29	19440	+11400	955.26	45220	+45127	1122.24	1150	+140
Apr. 30.....	1020.14	13640	-5800	947.85	12750	-32470	1121.76	1070	-80
May 31.....	1020.47	13940	+300	939.32	521	-12229	1121.72	1060	-10
June 30.....	1020.01	13520	-420	933.58	49	-472	1121.55	1030	-30
July 31.....	1019.44	13050	-470	933.29	37	-12	1129.29	988	-42
Aug. 31.....	1019.40	13020	-30	933.32	38	+1	1121.27	985	-3
Sept. 30.....	1019.28	12920	-100	933.41	42	+4	1121.12	960	-25
WTR YR 1978	-	-	-130	-	-	0	-	-	-21
	03138000 MOHAWK RESERVOIR			03141000 SENECAVILLE LAKE			03142290 SALT FORK RESERVOIR		
Sept. 30.....	801.86	121	-	832.21	41330	-	800.43	43280	-
Oct. 31.....	801.42	97	-24	832.23	41410	+80	800.39	43160	-120
Nov. 30.....	804.34	311	+214	830.15	34390	-7020	800.69	44090	+930
Dec. 31.....	811.18	1300	+989	828.19	28460	-5930	801.01	45080	+990
CAL YR 1977	-	-	+1145	-	-	-90	801.01	-	+900
Jan. 31.....	828.28	13240	+11940	830.73	36300	+7840	802.50	49950	+4870
Feb. 28.....	805.28	403	-12837	828.29	28750	-7550	800.75	44280	-5670
Mar. 31.....	849.64	62690	+62287	833.63	46560	+17810	802.20	48930	+4650
Apr. 30.....	811.67	1420	-61270	832.24	41440	-5120	801.30	46010	-2920
May 31.....	807.17	622	-798	832.28	41590	+150	801.35	46170	+160
June 30.....	803.75	258	-364	832.62	42810	+1220	802.46	49810	+3640
July 31.....	801.47	99	-159	832.25	41480	-1330	800.44	43310	-6500
Aug. 31.....	801.83	119	+20	832.29	41620	+140	800.43	43280	-30
Sept. 30.....	801.30	90	-29	832.03	40690	+70	800.18	42510	-770
WTR YR 1978	-	-	-31	-	-	+360	-	-	-770
	03143000 WILLS CREEK LAKE			03147300 DILLON LAKE					
Sept. 30.....	741.93	4360	-	737.06	17560	-			
Oct. 31.....	741.85	4290	-70	737.08	17590	+30			
Nov. 30.....	743.44	5910	+1620	734.37	13630	-3960			
Dec. 31.....	743.11	5530	-380	734.04	13170	-460			
CAL YR 1977	-	-	+1100	-	-	0			
Jan. 31.....	754.99	30290	+24760	747.80	40590	+27420			
Feb. 28.....	742.47	4880	-25410	733.65	12670	-27920			
Mar. 31.....	761.30	55990	+51110	762.76	94730	+82060			
Apr. 30.....	744.14	6750	-49240	737.13	17670	-77060			
May 31.....	743.34	5790	-960	737.30	17940	+270			
June 30.....	745.77	9070	+3280	737.06	17560	-380			
July 31.....	741.98	4400	-4670	737.18	17750	+190			
Aug. 31.....	742.79	5190	+790	742.35	27150	+9400			
Sept. 30.....	741.56	4050	-1140	737.22	17810	-9340			
WTR YR 1978	-	-	-310	-	-	+250			

03156000 HUNTERS RUN AT LANCASTER, OH

LOCATION.--Lat 39°41'57", long 82°37'18", in NE 1/4 sec. 11, T.14N., R.19W., Fairfield County, Hydrologic Unit 05030204, on right bank at downstream side of bridge on U.S. Highway 22, 1.0 mi (1.6 km) southwest of Lancaster, and 1.5 mi (2.4 km) upstream from mouth.

DRAINAGE AREA.--10.0 mi² (25.9 km²).

PERIOD OF RECORD.--January 1956 to current year.

REVISED RECORDS.--WSP 1987: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 823.6 ft (251.03 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. Flood peaks affected by temporary retention in four retarding basins upstream from station, combined capacity, 2,820 acre-ft (3.48 hm³). Controlled drainage area is 8.49 mi² (22.0 km²). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--22 years, 10.0 ft³/s (0.283 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,820 ft³/s (51.5 m³/s) May 27, 1968, gage height, 8.00 ft (2.438 m), from rating curve extended above 600 ft³/s (17.0 m³/s) on basis of slope-area measurement at gage height, 7.09 ft (2.161 m) and 6.53 ft (1.990 m); minimum daily, 0.08 ft³/s (0.002 m³/s) July 8, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 21 or 22, 1948 reached a stage of 15.4 ft (4.69 m), discharge, 11,200 ft³/s (317 m³/s), on basis of contracted-opening measurement of peak flow at Pennsylvania Railroad bridge, 0.8 mi (1.3 km) upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 633 ft³/s (17.9 m³/s) Mar. 14, gage height 5.43 ft (1.655 m); minimum daily, 0.04 ft³/s (0.024 m³/s) Nov. 12-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	1.9	58	3.3	12	6.0	13	8.3	5.4	2.9	2.5	3.5
2	19	1.9	22	3.9	11	5.8	11	7.9	5.6	3.3	2.2	3.1
3	6.4	1.9	22	3.2	10	5.6	11	7.6	5.3	3.5	2.3	2.7
4	3.1	1.9	16	3.1	9.0	5.6	11	35	4.6	3.3	2.3	2.7
5	1.9	1.9	110	3.1	9.2	5.9	11	32	4.1	2.9	2.2	2.5
6	4.3	1.9	26	6.1	8.8	5.9	16	19	4.1	2.9	2.9	2.5
7	2.5	3.1	12	13	8.6	5.2	19	11	4.8	2.4	88	2.5
8	12	1.9	10	92	8.2	5.2	13	49	12	2.1	8.5	2.5
9	12	1.6	13	33	8.0	5.2	14	59	10	2.1	5.3	2.3
10	7.7	1.6	12	22	7.8	7.0	13	21	5.6	2.7	8.9	2.3
11	4.5	1.2	9.2	17	7.6	11	19	14	4.6	2.1	7.0	2.2
12	8.9	.84	8.2	15	7.4	53	26	16	4.6	2.7	11	2.2
13	7.1	.84	27	10	7.4	115	12	55	4.6	2.7	8.2	2.2
14	6.4	.84	120	8.5	7.2	363	12	32	4.1	3.1	6.4	2.2
15	3.8	.94	27	7.6	7.0	67	11	27	3.9	2.7	7.6	2.2
16	2.5	2.2	16	6.6	7.0	38	11	20	3.9	2.7	5.3	2.2
17	2.5	8.9	13	6.0	7.0	26	11	18	3.9	2.3	4.8	2.2
18	3.1	2.5	11	5.9	6.8	19	50	13	3.9	1.9	3.9	2.2
19	3.8	1.4	9.5	4.8	6.8	17	100	11	8.5	2.3	3.7	1.9
20	2.5	1.4	8.2	4.4	6.8	14	125	9.9	4.1	2.3	3.5	1.9
21	2.2	10	7.4	4.0	6.8	27	146	9.2	3.1	2.3	3.3	1.9
22	1.9	6.4	6.6	3.9	6.6	21	93	8.2	3.9	2.5	3.1	1.9
23	1.9	3.8	6.0	5.0	6.6	18	15	8.5	3.5	2.5	3.1	1.7
24	1.6	3.1	5.4	11	6.4	18	14	8.9	3.5	3.3	2.9	1.7
25	1.9	2.5	5.0	40	5.9	82	27	7.5	3.3	3.1	2.9	1.7
26	3.8	2.2	4.8	43	6.2	143	21	5.4	3.5	2.7	2.7	1.7
27	3.1	1.9	4.5	57	6.2	53	13	6.1	3.3	2.3	3.1	1.6
28	2.5	1.9	4.2	45	6.9	28	11	6.1	3.1	2.2	3.7	1.6
29	2.2	1.9	4.0	30	---	22	9.9	7.3	3.1	2.2	3.3	1.4
30	2.2	33	3.8	19	---	18	9.2	14	2.9	2.7	3.7	1.9
31	1.9	---	3.6	13	---	15	---	10	---	2.9	4.6	---
TOTAL	161.8	107.41	805.4	579.6	215.4	1231.4	885.1	555.2	143.8	83.9	224.0	65.1
MEAN	5.22	3.58	19.5	18.7	7.69	39.7	29.8	17.9	4.79	2.71	7.23	2.17
MAX	19	33	120	92	12	363	146	59	12	3.5	88	3.5
MIN	1.6	.84	3.6	3.1	6.0	5.2	9.2	6.1	2.9	1.9	2.2	1.4

CAL YR 1977 TOTAL 2974.75 MEAN 8.15 MAX 120 MIN .08
WTR YR 1978 TOTAL 4838.11 MEAN 13.3 MAX 363 MIN .84

03157000 CLEAR CREEK NEAR ROCKBRIDGE, OH

LOCATION.--Lat 39°35'18", long 82°38'43", in NE 1/4 sec. 20, T.13 N., R.18 W., Hocking County, Hydrologic Unit 05030204, on left bank at upstream side of county road bridge, 400 ft (122 m) downstream from unnamed right bank tributary, 2.0 mi (3.2 km) upstream from mouth, and 3 mi (5 km) west of Rockbridge.

DRAINAGE AREA.--89.0 mi² (231 km²).

PERIOD OF RECORD.--October 1939 to current year.

REVISED RECORDS.--WSP 1305: 1940(M), 1943(M), 1945(M). WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 760.13 ft (231.689 m) National Geodetic Vertical Datum of 1912. Prior to May 2, 1940, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods and no gage-height record, which are fair. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--39 years, 86.7 ft³/s (2.455 m³/s), 13.23 in/yr (336 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft³/s (453 m³/s) July 22, 1948, gage height, 17.68 ft (5.389 m) (from high-water mark in well), from rating curve extended above 4,300 ft³/s (122 m³/s) on basis of slope-area measurement of peak flow; minimum, 3.0 ft³/s (0.085 m³/s) Dec. 29, 1947, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,900 ft³/s (42.5 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 26	0430	2310	65.4	8.78	2.676	Mar. 14	1500	*2840	*80.4	*9.63	2.935

Minimum discharge, 18 ft³/s (0.51 m³/s) Sept. 26, 27, 29.

Note: No gage height record May 21 to July 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	26	333	41	110	52	134	92	140	23	23	27
2	98	26	148	40	85	50	112	84	110	24	21	23
3	69	25	120	38	75	50	107	79	90	23	21	21
4	43	26	109	37	72	50	105	86	72	22	21	21
5	36	27	623	36	68	50	104	317	64	21	20	20
6	35	26	390	36	66	50	107	168	60	28	99	20
7	37	28	197	50	64	50	134	130	58	32	204	19
8	45	29	150	517	62	50	104	120	100	40	67	19
9	75	27	180	443	60	50	94	566	210	64	38	19
10	67	27	127	220	58	52	90	284	220	60	72	19
11	52	26	107	184	58	60	94	182	150	50	67	19
12	44	25	99	150	56	390	91	150	110	45	103	19
13	39	24	112	120	55	763	80	347	80	38	81	19
14	35	25	786	100	55	2200	71	438	58	32	48	20
15	32	25	454	85	55	1190	68	344	52	27	47	20
16	32	25	230	70	54	542	64	254	47	24	37	20
17	32	41	162	60	54	368	63	303	42	22	35	20
18	30	44	134	50	54	260	80	198	38	21	29	20
19	30	35	112	45	54	242	548	152	35	21	26	20
20	30	32	100	40	53	222	272	126	170	21	25	19
21	29	56	90	38	53	280	244	114	120	20	22	19
22	28	86	80	36	52	246	193	100	80	21	22	19
23	27	59	75	40	52	184	154	90	55	20	21	19
24	27	50	68	80	52	170	146	94	35	24	21	19
25	26	42	62	250	52	313	164	105	20	29	21	19
26	29	42	58	1050	52	1430	242	94	25	26	20	18
27	29	37	54	809	52	797	175	82	30	25	22	18
28	28	37	50	600	52	370	118	72	26	22	24	19
29	27	34	48	400	---	258	107	66	24	21	26	18
30	27	43	45	260	---	184	100	120	21	22	25	19
31	26	---	43	170	---	154	---	170	---	33	32	---
TOTAL	1214	1055	5346	6097	1685	11127	4155	5527	2342	893	1340	591
MEAN	39.2	35.2	172	197	60.2	359	139	178	78.1	28.8	43.2	19.7
MAX	98	86	786	1050	110	2200	548	566	220	64	204	27
MIN	26	24	43	36	52	50	63	66	20	20	20	18
CFSM	.44	.40	1.93	2.21	.68	4.03	1.56	2.00	.88	.32	.49	.22
IN.	.51	.44	2.23	2.55	.70	4.65	1.74	2.31	.98	.37	.56	.25

CAL YR 1977 TOTAL 27291 MEAN 74.8 MAX 800 MIN 19 CFSM .84 IN 11.41
WTR YR 1978 TOTAL 41382 MEAN 113 MAX 2200 MIN 18 CFSM 1.27 IN 17.30

03157500 HOCKING RIVER AT ENTERPRISE, OH

LOCATION.--Lat 39°33'58", long 82°28'29", in NW 1/4 sec. 5,T.14 N., R.17 W., Hocking County, Hydrologic Unit 05030204, at right bank at upstream side of abandoned bridge at Enterprise, 4.0 mi (6.4 km) downstream from Buck Run, and 6.3 mi (5.9 km) upstream from Scott Creek.

DRAINAGE AREA.--459 mi² (1,189 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1930 to current year. Prior to May 1931 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 871: 1938. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 723.58 ft (220.587 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 24, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods and no gage-height record, which are fair. Flood flow affected by temporary retention in eight retarding basins, combined capacity, 8,710 acre-ft (10.7 hm³) constructed between 1955 and 1961 upstream from station. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--48 years, 447 ft³/s (12.66 m³/s), 13.23 in/yr (336 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,000 ft³/s (736 m³/s) Mar. 10, 1964, gage height, 21.31 ft (6.495 m), from rating curve extended above 17,000 ft³/s (481 m³/s) on basis of contracted-opening and slope-area measurement of peak flow; minimum daily, 23 ft³/s (0.65 m³/s) Aug. 12, 13, 1948.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1907, reached a stage of 22.0 ft (6.71 m), from floodmark, discharge, 36,000 ft³/s (1,020 m³/s), from reports of Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,500 ft³/s (99.1 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 26	---	5400	153	Ice jam		Mar. 27	0300	4370	124	10.39	3.167
Mar. 15	0430	*8100	229	*14.42	4.395						

Minimum discharge, 64 ft³/s (1.81 m³/s) Sept. 26.

Note: No gage height record May 10 to July 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	268	111	970	180	1000	180	733	480	700	125	113	273
2	561	109	826	180	860	180	618	431	560	120	96	176
3	334	109	531	170	720	180	572	390	430	115	90	137
4	209	113	550	165	600	180	561	452	440	110	90	153
5	168	121	1550	160	520	180	595	1450	360	105	90	156
6	174	115	2290	160	460	185	576	934	310	100	400	123
7	194	129	1790	242	420	190	938	677	280	130	1080	105
8	218	127	885	1140	360	200	757	700	430	140	431	98
9	373	129	795	2520	350	220	834	2080	1000	270	225	92
10	338	141	625	1550	320	260	555	1450	1100	320	319	87
11	244	133	585	1100	300	438	538	1100	790	280	614	84
12	203	131	448	980	240	1070	538	880	540	240	347	83
13	181	115	452	780	280	2240	459	980	360	200	477	84
14	164	109	1460	550	250	5460	400	1700	300	170	270	84
15	151	109	2610	460	230	7580	357	1900	280	140	228	84
16	149	109	2000	390	220	5530	341	1400	240	115	181	84
17	145	174	1090	330	220	2780	328	1150	220	96	207	93
18	137	198	802	290	210	1710	357	640	190	93	174	93
19	135	157	655	260	210	1320	1790	800	220	93	141	84
20	131	139	550	230	200	1240	1420	660	920	90	135	80
21	125	198	480	210	195	1300	1250	560	600	89	119	77
22	119	344	420	190	190	1360	1030	480	420	90	105	74
23	119	254	370	210	185	995	806	450	260	87	99	73
24	113	214	330	330	180	925	752	490	180	111	95	71
25	115	189	300	1500	180	1030	772	520	120	137	93	71
26	129	183	270	4500	180	3530	1170	450	115	117	89	70
27	125	166	250	4100	180	3840	849	410	150	109	93	70
28	121	157	230	3000	180	2610	689	350	135	92	172	71
29	117	160	220	2300	---	1560	591	330	120	84	181	70
30	113	179	210	1800	---	1050	531	700	105	90	164	71
31	111	---	190	1300	---	849	---	900	---	137	328	---
TOTAL	5744	4627	25155	31417	9980	59422	21657	26204	11855	4245	7246	2981
MEAN	185	154	811	1013	339	1627	722	845	395	137	234	99.4
MAX	561	344	2610	4500	1000	7580	1790	2080	1100	320	1080	273
MIN	111	109	190	160	180	180	328	330	105	84	89	70
CFSM	.40	.34	1.77	2.21	.74	3.55	1.57	1.84	.86	.30	.51	.22
IN.	.47	.37	2.04	2.55	.77	4.09	1.76	2.12	.96	.34	.59	.24

CAL YR 1977 TOTAL 130880 MEAN 359 MAX 2080 MIN 65 CFSM .78 IN 10.61
WTR YR 1978 TOTAL 201033 MEAN 551 MAX 7580 MIN 70 CFSM 1.20 IN 16.29

03158500 BURR OAK RESERVOIR AT BURR OAK, OH

LOCATION.--Lat 39°32'30", long 82°03'27", near center of sec. 6, T.11 N., R.14 W., Athens County, Hydrologic Unit 05030204, in control house of Tom Jenkins Dam on East Branch Sunday Creek, 0.2 mi (0.3 km) upstream from mouth, 0.4 (0.6 km) southeast of Burr Oak, and 3.0 mi (4.8 km) northeast of Glouster.

DRAINAGE AREA.--33.1 mi² (85.7 km²).

PERIOD OF RECORD.--February 1952 to current year. Published as Tom Jenkins Reservoir at Burr Oak October 1952 to September 1962.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by earth dam with emergency spillway; storage began Feb. 2, 1952. Capacity at spillway level, elevation, 740 ft (226 m), 26,900 acre-ft (33.2 hm³), of which 9,220 acre-ft (11.4 hm³) is in water supply pool. Dead storage, 35 acre-ft (43,200 m³). Figures given herein represent usable contents. Reservoir is used for flood control, although water supply pool is operated for increased low flow for recreation and conservation of fish and wildlife. Outflow is controlled by operation of gates in conduit through dam.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 17,820 acre-ft (22.0 hm³) May 31, 1968, elevation, 731.53 ft (222.970 m); minimum, 3,850 acre-ft (4.25 hm³) Nov. 20, 1953, elevation, 709.89 ft (216.374 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 12,500 acre-ft (15.4 hm³) Mar. 16, elevation, 725.87 ft (221.123 m); minimum, 9,130 acre-ft (11.3 hm³) Mar. 8, 9, elevation, 720.86 ft (219.718 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	720.98	9210	--
Oct. 31	721.02	9240	+30
Nov. 30	721.10	9290	+50
Dec. 31	721.02	9240	-50
CAL YR 1977	--	--	-220
Jan. 31	721.49	9560	+320
Feb. 28	720.92	9170	-390
Mar. 31	721.13	9310	+140
Apr. 30	721.03	9250	-60
May 31	721.35	9460	+210
June 30	721.25	9400	-60
July 31	721.34	9460	+60
Aug. 31	721.13	9310	-150
Sept. 30	720.97	9210	-100
WTR YR 1978	--	--	0

03159000 SUNDAY CREEK AT GLOUSTER, OH

LOCATION.--Lat 39°30'03", long 82°05'07", Athens County, Hydrologic Unit 05030204, on left bank 150 ft (46 m) downstream from West Branch and 200 ft (61 m) upstream from bridge on State Highway 78 at Glouster.

DRAINAGE AREA.--104 mi² (269 km²).

PERIOD OF RECORD.--October 1951 to September, 1978 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 665.18 ft (202.747 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 4, 1951, nonrecording gage at site 300 ft (91 m) downstream at same datum.

REMARKS.--Records good. Flow partially regulated by Burr Oak Reservoir 5.2 mi (8.4 km) upstream (see station 03158500). Most of small diversion downstream from Burr Oak Reservoir, average discharge 0.90 ft³/s (0.025 m³/s), is returned to stream upstream from station. Water-quality data collected at this site 1964 to 1977.

AVERAGE DISCHARGE.--27 years, 108 ft³/s (3.059 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,020 ft³/s (199 m³/s) Mar. 5, 1963, gage height, 17.81 ft (5.428 m), from rating curve extended above 3,600 ft³/s (102 m³/s) on basis of velocity-area study and flow-over-road estimate of peak discharge; minimum daily, 0.5 ft³/s (0.014 m³/s) Nov. 2, 3, Dec. 5, 1973.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1907 reached a stage of 22.0 ft (6.71 m), from information by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,610 ft³/s (45.6 m³/s) Mar. 14, gage height, 13.16 ft (4.103 m); minimum daily, 10 ft³/s (0.28 m³/s) Oct. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	13	60	58	248	31	123	83	44	21	29	29
2	27	13	88	60	94	30	108	64	44	25	20	25
3	19	13	88	54	65	30	105	59	215	25	18	24
4	21	12	85	49	58	30	102	83	97	23	19	25
5	19	12	557	52	56	30	145	277	81	20	21	26
6	19	13	621	56	52	30	145	181	91	19	25	26
7	21	13	380	66	52	32	233	147	113	19	70	27
8	24	13	213	421	50	34	191	238	354	19	53	28
9	33	13	103	746	48	39	159	922	629	19	75	29
10	32	14	85	396	47	69	175	513	376	21	162	29
11	22	17	66	349	45	160	176	293	167	23	159	30
12	18	15	79	144	42	539	114	168	90	20	132	31
13	15	15	105	75	41	852	105	305	62	21	78	33
14	10	14	328	54	40	1470	83	416	44	21	24	36
15	10	14	367	47	38	1070	59	354	37	19	22	40
16	11	14	238	45	37	531	55	245	33	20	20	37
17	12	21	126	42	36	734	53	171	30	20	19	37
18	12	25	106	41	35	675	71	150	28	20	19	35
19	12	19	87	40	35	624	196	110	47	21	18	34
20	11	17	86	39	35	433	275	77	39	21	18	34
21	11	21	86	38	35	186	317	69	30	25	19	35
22	11	79	79	38	35	215	270	61	26	21	21	35
23	12	79	73	39	34	179	234	59	23	18	23	36
24	12	27	72	40	34	152	182	80	22	21	23	38
25	12	23	81	188	33	220	138	67	22	23	23	39
26	12	21	70	1260	32	700	164	58	25	19	24	39
27	12	19	61	1090	32	971	134	49	23	19	24	40
28	12	19	51	368	31	614	117	45	22	19	25	39
29	12	19	51	460	---	350	107	78	21	19	27	40
30	12	23	52	426	---	152	100	71	21	22	29	37
31	13	---	52	400	---	134	---	55	---	43	43	---
TOTAL	500	630	4618	7185	1420	11321	4436	5548	2856	666	1282	993
MEAN	16.1	21.0	149	232	50.7	365	148	179	95.2	21.5	41.4	33.1
MAX	33	79	621	1260	248	1470	317	922	629	43	162	40
MIN	10	12	51	38	31	30	53	45	21	18	18	24

CAL YR 1977 TOTAL 30918.1 MEAN 84.7 MAX 1230 MIN 3.6
WTR YR 1978 TOTAL 41455.0 MEAN 114 MAX 1470 MIN 10

03159510 HOCKING RIVER BELOW ATHENS, OH

LOCATION.--Lat 39°19'39", long 82°00'18", Athens County, Hydrologic Unit 05030204, at downstream side of Harmony Lane Bridge, 3.5 mi (5.6 km) east of Athens, 1.1 mi (1.8 km) downstream from Strouds Run, and 2.8 mi (4.5 km) upstream from Scott Creek.

DRAINAGE AREA.--957 mi² (2,479 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is 600.00 ft (182.880 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 17, 1931, nonrecording gage at site 5.3 mi (8.5 km) upstream at datum 11.26 ft (3.432 m) higher, Aug. 18, 1931 to June 18, 1970, at datum 14.81 ft (4.514 m) higher, and Oct. 1, 1971 to Sept. 30, 1976, at datum 11.26 ft (3.432 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Some regulation by Burr Oak Reservoir on East Branch Sunday Creek 34.3 mi (55.2 km) upstream beginning 1952 (see station 03158500); by Hocking Lake, capacity 3,080 acre-ft (3.80 hm³), on Clear Fork 44.7 mi (71.9 km) upstream beginning in 1949; by temporary retention in eight retarding basins, combined capacity, 8,710 acre-ft (10.7 hm³), constructed between 1955 and 1961 upstream from Lancaster, and Dow Lake capacity 1,884 acre-ft (2.3 hm³), on Strounds Run, 1.1 mi (1.8 km) upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,800 ft³/s (362 m³/s) Mar. 16, 1978, gage height, 22.73 ft (6.928 m); minimum daily, 81 ft³/s (2.29 m³/s) Aug. 9, 1977.

EXTREMES OUTSIDE PERIOD RECORD.--Flood of Mar. 11, 1964 reached a stage of 24.18 ft (7.370 m) at site and datum then in use, discharge, 32,900 ft³/s (932 m³/s). Flood in March 1907 reached a stage of 27 ft (8 m), site and datum then in use, discharge 50,000 ft³/s (1,420 m³/s), estimated by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12,800 ft³/s (362 m³/s) Mar. 16, gage height, 22.73 ft (6.928 m); minimum daily, 82 ft³/s

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133	131	669	360	2600	420	1700	1030	1490	250	230	414
2	310	131	1460	350	1990	410	1490	907	968	250	200	353
3	580	132	1070	350	1670	400	1340	810	918	230	170	245
4	405	131	845	340	1440	400	1260	789	968	220	160	204
5	282	133	2100	340	1200	390	1260	1610	710	210	170	192
6	239	156	4830	340	1050	380	1330	2170	618	200	680	215
7	222	163	3490	414	920	370	1600	1510	608	250	2100	175
8	260	171	2160	1490	840	379	1890	1350	821	420	1100	154
9	324	191	1560	360	780	397	1540	4010	2630	600	580	140
10	473	218	1410	350	740	538	1330	4610	2350	700	600	132
11	433	249	1010	350	700	1180	1270	2690	1370	580	774	124
12	336	233	1630	340	680	2650	1220	1820	903	490	903	119
13	280	221	2410	1550	650	5660	1110	2170	721	400	825	115
14	242	198	2040	1250	620	8160	987	4480	690	330	1320	117
15	211	189	4130	1000	600	11400	866	3900	571	270	575	132
16	204	200	3450	880	580	12700	785	2860	488	230	439	142
17	193	288	2240	720	560	9460	721	2620	439	190	333	144
18	186	346	1490	600	540	5600	721	2110	403	160	315	126
19	179	331	1200	500	520	3450	1430	1710	414	175	286	126
20	169	261	1000	490	500	2860	2910	1410	1660	170	240	117
21	165	232	920	450	490	2380	2480	1220	1240	170	219	109
22	158	321	800	440	480	2430	2250	1120	803	165	199	102
23	150	541	700	440	470	2220	1900	1010	562	165	181	96
24	144	415	660	900	470	1850	1620	1100	465	210	162	93
25	140	322	580	2260	460	1880	1460	1130	403	280	144	91
26	141	280	520	7340	440	3810	1740	972	250	250	136	87
27	143	259	460	8400	430	7210	1910	836	350	220	132	87
28	147	247	430	7220	430	7200	1520	728	340	190	130	84
29	141	236	400	5640	---	4370	1280	674	280	170	181	82
30	137	274	390	4640	---	2560	1140	1890	240	200	233	82
31	133	---	370	3370	---	1950	---	1800	---	270	283	---
TOTAL	7260	7200	46424	53474	22850	105064	44080	57046	24673	8635	14000	4399
MEAN	234	240	1498	1725	816	3389	1469	1840	822	279	452	147
MAX	580	541	4830	8400	2600	12700	2910	4610	2630	700	2100	414
MIN	133	131	370	340	430	370	721	674	240	165	130	82

CAL YR 1977 TOTAL 274852 MEAN 753 MAX 6430 MIN 81
WTR YR 1978 TOTAL 395105 MEAN 1082 MAX 12700 MIN 82

03159510 HOCKING RIVER BELOW ATHENS, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1966 to current year.
pH: May 1966 to current year.
WATER TEMPERATURES: May 1966 to current year.
DISSOLVED OXYGEN: May 1966 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,500 micromhos July 12, 1966, Oct. 3, 1968, Aug. 6, 1975; minimum, 140 micromhos July 13, 1966, Mar. 5, 1967.
pH: Maximum, 8.9 units Sept. 30, 1977, Oct. 1, 1978; minimum, 3.3 units Aug. 6, 1975.
WATER TEMPERATURES: Maximum, 33.5°C July 18, 19, 21, 1977; minimum, 0.0°C on many days during winter periods.
DISSOLVED OXYGEN: Maximum, 15.0 mg/L or higher Jan. 31, Feb. 1, 16-20, 1973, Dec. 26, 1975; minimum, 0-3 mg/L August 12, 14, 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,360 micromhos Sept. 29; minimum, 207 micromhos Mar. 15.
pH: Maximum, 8.9 units Oct. 1; minimum, 6.7 units May 30, Sept. 6.
WATER TEMPERATURES: Maximum, 30.5°C July 22-24; minimum, 0.0°C on many days during winter period.
DISSOLVED OXYGEN: Maximum, 14.3 mg/L Feb. 19; minimum, 0.3 mg/L Aug. 12, 14.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
DEC												
21...	1200	595	7.4	4.0	25	--	11.8	90	--	--	1900	1300
JAN												
12...	1430	480	7.2	.0	20	--	12.5	86	--	--	250	1100
FEB												
14...	1100	795	7.6	.5	25	--	10.6	74	--	--	620	290
MAR												
14...	1330	275	6.9	1.5	250	--	13.4	96	--	--	1200	8800
APR												
05...	1530	630	7.1	12.5	35	--	10.2	95	20	--	1000	190
MAY												
03...	1300	600	7.4	12.5	15	--	10.0	93	--	--	480	140
JUN												
07...	1100	700	7.0	20.0	40	--	2.9	31	20	--	1100	2700
JUL												
12...	1130	865	7.3	22.5	--	40	3.3	38	24	--	1300	430
AUG												
08...	1545	650	7.2	22.5	--	18	1.0	11	--	30	3300	3300
SEP												
12...	1200	1010	7.9	24.0	--	10	7.3	86	--	20	590	210

03159510 HOCKING RIVER BELOW ATHENS, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
DEC												
21...	230	150	58	20	27	3.0	100	0	82	6.4	110	60
JAN												
12...	180	120	45	16	22	2.6	77	0	63	7.8	86	43
FEB												
14...	290	200	72	27	40	2.4	110	0	90	4.4	170	79
MAR												
14...	91	62	23	8.2	11	2.3	36	0	30	7.3	54	23
APR												
05...	230	150	55	22	26	2.4	95	0	78	12	140	46
MAY												
03...	230	160	56	23	28	2.3	92	0	75	5.9	150	49
JUN												
07...	260	180	64	25	31	2.9	100	0	82	16	170	51
JUL												
12...	340	230	84	31	47	3.6	--	--	110	--	210	78
AUG												
08...	200	150	52	18	21	4.0	--	--	51	--	130	37
SEP												
12...	350	230	89	32	70	3.8	--	--	120	--	240	110

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	PHYTOPLANKTON, TOTAL (CELLS PER ML)
DEC											
21...	.1	9.0	368	336	--	--	--	--	.11	15	--
JAN											
12...	.1	6.2	294	262	--	--	--	--	.07	--	--
FEB											
14...	1.0	10	468	456	.30	.69	1.8	7.9	.07	2.1	--
MAR											
14...	.1	6.6	177	146	1.8	2.0	3.4	15	.34	12	1600
APR											
05...	.1	9.3	391	349	.32	.45	1.7	7.3	.09	--	--
MAY											
03...	.2	7.4	390	359	.38	.49	1.4	6.1	.09	8.1	11000
JUN											
07...	.2	9.4	434	403	.47	.52	1.6	7.2	.11	15	[illegible]00
JUL											
12...	.2	6.3	610	527	.73	.44	1.5	6.5	.12	--	--
AUG											
08...	.2	7.3	342	300	1.3	1.4	3.7	16	.28	8.5	--
SEP											
12...	.4	2.3	619	620	.63	.89	1.1	5.0	.20	4.2	--

03159510 HOCKING RIVER BELOW ATHENS, OH--Continued

PESTICIDE ANALYSES

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALDRIN, TOTAL (UG/L)	ATRAZINE, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DIAZINON, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)
DEC												
01...	1130	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB												
14...	1100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAY												
03...	1300	ND	--	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG												
08...	1545	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALATHION, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)	METHYL TRITHION, TOTAL (UG/L)	PARATHION, TOTAL (UG/L)	SIMAZINE TOTAL COULSON COND. (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOTAL TRITHION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
DEC												
01...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB												
14...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAY												
03...	ND	ND	ND	ND	ND	ND	--	ND	ND	--	--	--
AUG												
08...	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--

ANALYSES OF MINOR ELEMENTS

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)
JAN												
12...	1430	0	0	0	0	<10	0	4	4	10	4	2300
APR												
05...	1530	2	1	3	1	20	0	9	6	12	4	7500
JUL												
12...	1130	0	0	2	2	10	1	0	0	10	6	2400

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
JAN											
12...	100	8	7	630	590	<.5	<.5	0	0	30	10
APR											
05...	8	45	1	1100	750	<.5	<.5	0	0	70	20
JUL											
12...	30	14	15	440	330	.5	.5	0	0	30	20

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
DEC					
21...	1200	1040	4.0	50	168
JAN					
12...	1430	1060	.0	78	392
FEB					
19...	1100	820	.5	35	54
MAR					
15...	1330	5280	1.5	721	10100
APR					
05...	1530	1240	12.5	81	282
MAY					
03...	1300	807	12.5	35	76
JUN					
07...	1100	655	20.0	79	140
JUL					
12...	1130	540	22.5	74	108
AUG					
08...	1545	120	22.5	302	98
SEP					
12...	1200	119	24.0	30	9.6

03159510 HOCKING RIVER BELOW ATHENS, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1050	809	1080	975	897	704	---	---	---	---	875	809
2	983	848	1130	981	909	653	---	---	---	---	866	818
3	1090	639	1080	995	693	641	---	---	---	---	884	812
4	762	669	1070	999	678	647	839	812	---	---	887	827
5	894	731	1060	974	648	353	872	807	---	---	884	849
6	843	746	1100	965	513	386	878	803	---	---	876	840
7	906	786	1030	957	438	413	834	774	---	---	873	768
8	894	815	996	876	462	441	786	465	---	---	839	797
9	854	827	953	864	549	470	498	366	---	---	843	789
10	893	785	915	792	624	555	417	372	---	---	818	717
11	860	773	893	824	626	597	432	417	---	---	738	611
12	836	786	959	830	---	---	---	---	---	---	588	420
13	909	770	989	935	---	---	---	---	---	---	416	302
14	857	786	951	881	624	579	---	---	---	---	297	231
15	906	800	915	806	633	387	---	---	---	---	228	207
16	935	795	942	803	414	389	---	---	---	---	225	212
17	909	833	839	743	482	420	---	---	822	770	---	---
18	951	860	854	759	552	480	---	---	830	768	---	---
19	954	870	900	813	579	531	---	---	831	788	---	---
20	944	872	941	861	605	555	---	---	834	800	---	---
21	1020	891	927	839	633	594	---	---	852	806	461	441
22	993	905	957	906	620	586	---	---	860	809	488	444
23	1010	921	1120	929	651	608	---	---	858	816	470	432
24	1030	962	942	702	666	632	---	---	855	818	501	461
25	1050	929	881	816	695	650	---	---	875	828	524	477
26	998	942	897	816	723	680	---	---	903	821	494	333
27	1060	953	908	854	807	702	---	---	933	833	327	294
28	1040	971	921	870	---	---	---	---	867	818	333	288
29	1070	971	1000	873	---	---	---	---	---	---	380	332
30	1130	999	975	878	---	---	---	---	---	---	453	393
31	1090	1010	---	---	---	---	---	---	---	---	498	455
MONTH	1130	639	1130	702	909	353	878	366	933	768	887	207

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	530	486	600	567	488	411	900	834	1080	947	920	884
2	560	527	612	585	542	461	899	804	1120	1040	924	872
3	599	564	651	597	629	540	774	632	1070	996	891	752
4	603	569	681	618	671	611	855	699	1020	978	774	753
5	630	575	639	549	659	621	866	776	989	927	840	783
6	632	563	530	428	687	573	837	776	1010	863	878	761
7	585	530	513	468	725	672	794	698	1030	965	899	836
8	543	501	525	489	725	657	827	675	948	806	944	849
9	627	504	467	333	647	435	713	608	636	621	959	894
10	560	524	378	330	462	420	833	725	680	597	981	920
11	566	534	417	380	497	449	857	768	741	680	990	944
12	566	531	494	423	569	492	881	836	743	672	1040	987
13	597	552	485	435	636	564	---	---	666	644	1130	974
14	629	572	434	357	674	636	---	---	633	525	1110	1010
15	644	615	390	366	689	666	---	---	579	545	1060	966
16	680	630	434	393	776	693	---	---	611	578	1070	803
17	713	668	440	410	777	759	---	---	671	615	1110	803
18	735	659	468	431	797	710	---	---	717	674	1080	1010
19	708	618	504	428	809	762	---	---	756	717	1160	1020
20	593	401	522	504	810	432	987	887	797	759	1130	986
21	462	438	566	530	522	435	1010	951	851	794	1070	956
22	467	446	609	572	531	495	1040	939	873	833	1100	999
23	485	458	612	575	561	533	1150	1010	915	875	1150	1070
24	506	476	623	586	651	563	1130	1010	921	867	1210	1070
25	525	492	632	582	686	623	1020	971	917	891	1270	1110
26	554	489	644	587	713	651	1010	939	932	902	1290	1210
27	495	476	671	618	752	725	1050	927	968	939	1320	1110
28	522	482	693	639	822	756	1030	995	983	942	1240	1160
29	555	513	705	654	834	777	1010	918	1020	975	1360	1140
30	572	545	687	386	875	825	969	906	1010	897	1220	1180
31	---	---	455	374	---	---	951	806	908	854	---	---
MONTH	735	401	705	330	875	411	1150	608	1120	525	1360	752
YEAR	1360	207										

HOCKING RIVER BASIN

03159510 HOCKING RIVER BELOW ATHENS, OH--Continued

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.9	8.1	8.1	7.9	7.6	7.4	---	---	---	---	7.5	7.3
2	8.2	7.6	8.2	7.8	7.6	7.4	---	---	---	---	---	---
3	7.7	7.5	8.1	7.8	7.7	7.5	---	---	---	---	---	---
4	7.7	7.5	8.0	7.8	7.6	7.6	7.5	7.4	---	---	---	---
5	7.8	7.5	7.9	7.8	7.6	7.2	7.5	7.3	---	---	---	---
6	7.8	7.6	7.9	7.8	7.5	7.1	7.6	7.4	---	---	---	---
7	7.8	7.8	7.9	7.8	7.4	7.3	7.6	7.1	---	---	---	---
8	8.0	7.8	8.0	7.8	7.4	7.4	7.4	7.1	---	---	---	---
9	8.1	7.8	7.9	7.6	7.7	7.3	7.5	7.4	---	---	---	---
10	7.8	7.6	7.8	7.6	7.6	7.6	7.5	7.4	---	---	---	---
11	7.8	7.6	7.8	7.7	7.6	7.6	7.4	7.4	---	---	---	---
12	7.9	7.8	7.8	7.6	---	---	---	---	---	---	---	---
13	7.9	7.6	7.8	7.5	---	---	---	---	---	---	---	---
14	7.7	7.6	7.8	7.6	---	---	---	---	---	---	---	---
15	7.8	7.6	7.9	7.6	7.5	7.3	---	---	---	---	7.2	7.0
16	7.9	7.7	7.8	7.6	7.5	7.3	---	---	---	---	7.2	7.2
17	7.9	7.8	7.7	7.5	7.5	7.3	---	---	---	---	---	---
18	7.9	7.7	7.6	7.5	7.4	7.1	---	---	---	---	---	---
19	7.8	7.7	7.6	7.4	7.5	7.4	---	---	---	---	---	---
20	7.8	7.7	7.5	7.5	7.5	7.4	---	---	---	---	---	---
21	7.8	7.6	7.5	7.4	7.5	7.4	---	---	7.6	7.4	7.3	7.2
22	7.8	7.6	7.7	7.5	7.6	7.5	---	---	7.6	7.4	7.3	7.2
23	7.9	7.6	7.5	7.0	7.6	7.5	---	---	7.5	7.3	7.2	7.2
24	7.9	7.7	7.7	7.3	7.6	7.4	---	---	7.5	7.3	7.3	7.2
25	7.9	7.7	7.8	7.6	7.6	7.6	---	---	7.4	7.3	7.3	7.2
26	7.9	7.6	8.0	7.8	7.6	7.6	---	---	7.4	7.3	7.3	7.1
27	8.0	7.6	7.9	7.8	---	---	---	---	7.5	7.2	7.3	7.2
28	8.0	7.8	7.9	7.8	---	---	---	---	7.5	7.2	7.3	7.2
29	8.1	7.8	7.8	7.7	---	---	---	---	---	---	7.3	7.1
30	8.1	7.8	7.7	7.6	---	---	---	---	---	---	7.2	7.2
31	8.1	7.9	---	---	---	---	---	---	---	---	7.2	7.0
MONTH	8.9	7.5	8.2	7.0	7.7	7.1	7.6	7.1	7.6	7.2	7.5	7.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.2	7.1	7.5	7.4	7.2	6.9	7.7	7.4	7.4	7.0	7.3	7.1
2	7.3	7.2	7.5	7.4	7.1	6.9	7.7	7.4	7.3	7.1	7.4	7.2
3	7.3	7.2	7.5	7.4	7.2	7.0	7.4	7.2	7.6	7.3	7.3	6.9
4	7.3	7.2	7.5	7.4	7.2	7.1	7.4	7.2	8.0	7.5	7.1	6.9
5	7.3	7.1	7.5	7.1	7.2	6.8	7.3	7.2	8.1	7.7	7.2	6.8
6	7.3	7.2	7.5	7.3	7.0	6.9	7.5	7.2	8.2	7.6	7.1	6.7
7	7.3	7.1	7.4	7.4	7.0	6.9	7.5	7.1	8.0	7.3	8.4	7.2
8	7.2	7.2	7.5	7.4	7.1	6.9	7.4	7.1	7.4	7.1	8.0	7.6
9	7.3	7.2	7.4	7.0	7.1	6.9	7.4	7.0	7.3	7.1	7.6	7.2
10	7.3	7.1	7.2	7.2	7.2	6.9	7.4	7.1	7.4	7.2	7.6	7.2
11	7.3	7.2	7.3	7.2	7.0	6.8	7.4	7.2	7.4	7.0	7.6	7.2
12	7.3	7.2	7.3	7.3	7.1	6.8	7.5	7.3	7.3	7.0	8.1	7.7
13	7.3	7.3	7.4	7.2	7.2	7.0	---	---	7.4	7.1	8.1	7.7
14	7.4	7.3	7.3	7.0	7.2	7.2	---	---	7.4	7.3	8.1	7.8
15	7.4	7.3	7.3	7.3	7.3	7.1	---	---	7.3	6.9	8.1	7.6
16	7.4	7.3	7.4	7.3	7.2	7.0	---	---	7.4	7.1	7.9	7.3
17	7.3	7.2	7.4	7.3	7.2	6.9	---	---	7.5	7.0	7.7	7.3
18	7.5	7.3	7.4	7.2	7.4	6.8	---	---	7.3	7.1	7.6	7.2
19	7.5	7.1	7.4	7.2	7.4	7.2	---	---	7.3	6.8	7.8	7.3
20	7.5	7.3	7.3	7.2	7.1	7.0	7.6	7.3	7.3	7.2	8.1	7.4
21	7.5	7.4	7.4	7.3	7.2	7.0	7.6	7.3	7.6	7.3	8.2	7.5
22	7.5	7.3	7.4	7.3	7.3	7.2	7.6	7.3	7.6	7.4	8.1	7.6
23	7.5	7.4	7.4	7.4	7.4	7.1	7.5	7.2	7.6	7.3	8.2	7.7
24	7.5	7.3	7.4	7.2	7.4	7.2	7.4	7.1	7.5	6.9	8.1	7.6
25	7.5	7.4	7.3	7.1	7.2	6.9	7.4	7.2	7.3	7.0	8.1	7.8
26	7.4	7.3	7.3	7.1	7.1	6.9	7.5	7.1	7.4	7.3	8.1	7.8
27	7.5	7.3	7.4	7.2	7.2	6.9	7.6	7.5	7.6	7.2	8.1	7.8
28	7.5	7.3	7.4	7.2	7.6	7.3	7.6	7.5	7.5	7.0	8.1	7.9
29	7.5	7.3	7.5	7.1	7.6	7.3	7.7	7.5	7.5	7.0	8.2	7.9
30	7.4	7.4	7.6	6.7	7.8	7.3	7.8	7.6	7.5	7.0	8.1	7.9
31	---	---	7.2	6.9	---	---	7.9	7.4	7.1	7.0	---	---
MONTH	7.5	7.1	7.6	6.7	7.8	6.8	7.9	7.0	8.2	6.8	8.4	6.7
YEAR	8.9	6.7										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03159510 HOCKING RIVER BELOW ATHENS, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	23.0	18.0	14.0	11.0	7.0	4.5	---	---	---	---	.5	.0
2	21.0	17.5	16.5	11.0	6.5	5.5	---	---	---	---	.0	.0
3	17.0	15.0	17.0	13.0	6.0	5.5	---	---	---	---	.0	.0
4	17.0	13.0	18.0	15.5	6.0	5.0	.0	.0	---	---	1.0	.0
5	16.0	12.5	19.5	16.0	5.5	4.5	.0	.0	---	---	.5	.0
6	17.5	13.5	19.5	17.0	5.5	3.5	.0	.0	---	---	1.5	.0
7	16.5	12.5	17.5	16.5	3.5	1.0	1.5	.5	---	---	1.0	.0
8	15.0	13.0	18.0	16.5	1.0	.0	2.5	1.5	---	---	.5	.0
9	14.0	12.0	19.5	16.0	.5	.0	2.0	.0	---	---	1.5	.0
10	14.0	11.5	18.5	11.5	.0	.0	.0	.0	---	---	2.0	.0
11	13.5	10.5	11.5	9.5	.0	.0	.0	.0	---	---	1.0	.0
12	11.0	9.5	9.0	7.0	---	---	---	---	---	---	1.5	.5
13	11.0	9.5	7.5	5.0	---	---	---	---	---	---	1.5	1.0
14	13.0	9.0	6.0	4.0	2.0	1.5	---	---	---	---	1.5	1.0
15	13.5	8.5	8.5	4.0	3.5	2.5	---	---	---	---	1.5	1.0
16	13.0	10.0	9.0	6.5	3.5	3.0	---	---	---	---	1.5	1.5
17	11.0	7.0	9.5	8.5	3.5	3.0	---	---	.0	.0	---	---
18	12.0	8.0	8.0	6.5	5.0	3.5	---	---	.0	.0	---	---
19	12.0	9.0	7.5	4.5	6.0	5.0	---	---	1.0	.0	---	---
20	12.5	8.0	7.5	5.5	6.0	5.0	---	---	.5	.0	---	---
21	13.5	8.0	8.0	7.5	5.0	3.5	---	---	.0	.0	6.5	6.0
22	13.0	9.0	7.5	6.5	3.5	2.0	---	---	.0	.0	8.0	6.0
23	13.5	10.5	8.0	6.5	3.0	1.5	---	---	.0	.0	8.0	7.0
24	15.0	10.5	9.0	7.5	3.5	1.5	---	---	.0	.0	8.0	7.0
25	15.0	12.0	7.0	6.0	3.5	1.5	---	---	.5	.0	7.0	6.0
26	16.5	13.0	5.5	2.5	1.0	.0	---	---	.5	.0	6.0	6.0
27	17.5	14.0	2.0	1.0	2.5	.5	---	---	1.0	.0	6.0	5.5
28	17.5	14.0	3.0	1.0	---	---	---	---	1.0	.0	6.5	5.0
29	15.5	12.0	2.0	.5	---	---	---	---	---	---	8.0	6.5
30	15.5	11.5	4.5	2.0	---	---	---	---	---	---	9.0	8.0
31	14.5	10.5	---	---	---	---	---	---	---	---	11.0	8.5
MONTH	23.0	7.0	19.5	.5	7.0	.0	2.5	.0	1.0	.0	11.0	.0
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13.0	10.0	16.0	13.0	24.0	20.5	28.0	24.5	27.0	22.0	23.5	21.5
2	13.0	11.0	16.0	12.0	24.0	22.0	26.5	23.5	29.0	22.0	24.0	21.5
3	12.0	11.0	16.5	12.0	24.0	22.5	24.0	22.5	29.0	24.5	23.5	21.5
4	12.5	10.5	14.0	12.5	23.0	21.0	23.5	22.0	27.5	24.5	24.5	22.0
5	13.5	11.5	12.0	11.0	22.0	20.5	23.5	21.5	28.0	23.5	24.0	21.5
6	14.0	11.5	11.0	10.0	22.5	20.5	26.5	21.0	26.0	23.0	24.5	22.5
7	14.5	12.0	11.5	10.5	22.0	20.0	27.5	23.0	26.5	23.5	26.5	22.5
8	14.0	13.0	12.5	11.0	22.0	21.0	27.5	24.5	24.0	22.5	26.5	23.0
9	14.0	12.0	13.5	12.5	22.0	21.0	26.5	23.5	24.5	22.5	26.5	24.0
10	15.5	12.0	14.5	13.5	22.0	20.0	27.0	24.5	25.0	23.0	27.0	25.0
11	14.5	13.5	15.0	13.5	23.0	20.0	25.5	23.0	24.0	23.0	27.0	23.5
12	15.5	12.0	15.5	14.5	24.0	21.5	24.5	22.0	23.0	22.5	27.0	24.0
13	16.0	13.0	15.0	14.5	23.0	21.5	---	---	23.5	22.5	27.0	24.5
14	15.0	12.5	14.5	13.0	21.5	19.5	---	---	23.5	22.0	26.5	23.5
15	15.5	11.5	13.0	12.0	21.5	19.5	---	---	25.0	23.0	27.0	23.0
16	14.0	11.0	12.5	11.5	23.0	20.0	---	---	26.0	24.5	26.5	22.0
17	15.0	10.5	13.5	12.0	24.5	21.5	---	---	26.5	25.0	24.5	21.5
18	13.5	11.0	15.5	13.0	27.0	23.0	---	---	27.0	25.0	27.0	22.5
19	13.0	11.5	18.5	14.5	27.0	24.0	---	---	28.0	25.0	27.0	24.0
20	12.0	10.5	21.5	17.5	25.5	23.5	29.5	25.0	26.5	25.0	28.5	24.5
21	10.0	8.5	22.0	18.5	24.0	23.0	29.5	26.0	26.5	24.0	29.0	25.0
22	10.0	8.0	21.0	17.5	24.5	23.0	30.5	27.0	26.5	25.0	28.0	20.0
23	10.0	9.5	19.5	17.5	24.5	22.0	30.5	27.0	26.5	25.0	21.0	18.5
24	11.5	9.5	19.0	17.0	25.5	22.5	30.5	25.0	26.5	25.0	23.5	19.5
25	12.0	11.0	21.5	17.0	25.5	22.5	27.0	25.0	26.5	25.0	21.0	19.5
26	11.5	11.0	23.5	19.0	26.5	23.5	27.5	23.5	26.5	24.0	21.5	18.0
27	13.0	10.0	25.0	20.0	29.0	25.0	28.0	24.5	25.5	24.5	21.5	18.5
28	14.5	11.5	26.0	20.5	30.5	26.0	28.5	25.0	26.5	24.5	22.0	18.0
29	15.5	12.5	25.5	22.5	30.0	25.0	29.0	24.5	27.0	25.0	19.5	15.5
30	16.5	13.5	24.0	20.5	29.0	24.5	27.0	24.0	26.5	23.5	20.0	17.5
31	---	---	23.0	20.5	---	---	24.0	22.5	23.5	22.0	---	---
MONTH	16.5	8.0	26.0	10.0	30.5	19.5	30.5	21.0	29.0	22.0	29.0	15.5
YEAR	30.5	.0										

03159510 HOCKING RIVER BELOW ATHENS, OH--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12.1	6.7	11.0	9.2	11.3	8.8	---	---	---	---	13.8	13.6
2	8.8	6.7	11.2	9.0	10.0	9.2	---	---	---	---	---	---
3	8.7	7.3	10.5	8.3	10.7	9.9	---	---	---	---	---	---
4	8.6	7.9	9.9	7.8	10.8	10.4	12.2	11.2	---	---	---	---
5	9.0	8.0	8.9	7.3	10.8	9.5	12.5	11.7	---	---	---	---
6	8.4	8.1	8.4	6.9	10.2	9.2	12.2	11.9	---	---	---	---
7	9.0	8.1	8.9	6.7	11.3	10.3	12.3	11.9	---	---	13.4	12.0
8	8.8	8.3	8.7	7.0	12.4	10.8	12.1	11.7	---	---	13.2	12.7
9	9.0	8.0	9.5	7.0	12.2	11.3	12.1	11.6	---	---	13.1	12.9
10	9.3	8.4	8.6	7.0	12.3	11.6	12.5	12.2	---	---	13.0	12.6
11	9.1	8.6	9.8	8.0	12.5	10.6	12.4	12.3	---	---	13.0	12.6
12	9.7	8.7	10.6	8.4	---	---	---	---	---	---	13.9	13.1
13	9.5	9.1	11.8	8.7	---	---	---	---	---	---	14.0	13.7
14	9.8	9.0	11.5	9.5	12.2	11.6	---	---	---	---	13.9	13.4
15	9.8	9.0	11.5	9.4	12.3	10.9	---	---	---	---	13.9	13.7
16	9.8	8.6	10.7	8.7	12.9	12.2	---	---	---	---	13.8	13.7
17	10.0	9.1	10.6	8.0	13.4	12.4	---	---	13.8	12.6	---	---
18	10.0	9.2	11.4	8.7	12.3	11.9	---	---	14.2	13.9	---	---
19	10.0	8.7	12.6	10.1	12.5	11.6	---	---	14.3	13.8	---	---
20	10.5	9.1	12.2	10.2	11.8	11.5	---	---	14.2	13.7	---	---
21	10.6	9.2	11.1	8.9	12.0	11.6	---	---	13.7	13.3	11.9	11.6
22	10.8	9.1	12.0	9.2	12.5	12.0	---	---	14.2	13.4	11.6	11.4
23	11.[illegible]	9.3	10.5	9.6	12.8	12.4	---	---	13.7	12.2	11.4	11.2
24	11.0	9.2	10.9	9.6	12.6	12.4	---	---	13.6	13.4	11.2	11.1
25	11.0	8.7	10.8	10.1	12.4	12.2	---	---	13.6	13.4	11.5	11.2
26	10.4	8.2	12.2	10.2	13.4	12.3	---	---	13.7	13.4	11.8	11.5
27	10.4	7.9	12.5	11.1	14.1	13.4	---	---	14.1	13.5	11.8	11.7
28	10.2	7.7	13.0	12.0	---	---	---	---	13.8	13.6	11.8	11.6
29	10.6	8.3	13.1	11.9	---	---	---	---	---	---	11.6	11.2
30	10.7	8.8	12.6	11.3	---	---	---	---	---	---	11.2	10.9
31	10.9	8.9	---	---	---	---	---	---	---	---	10.9	10.5
MONTH	12.1	6.7	13.1	6.7	14.1	8.8	12.5	11.2	14.3	12.2	14.0	10.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.5	10.0	9.7	9.3	5.6	2.7	7.9	4.6	5.1	2.9	---	---
2	10.1	10.0	9.7	9.4	3.3	1.7	5.5	3.3	6.9	3.4	---	---
3	10.1	10.1	10.1	9.3	3.5	1.2	3.0	1.4	6.4	4.2	---	---
4	10.2	9.9	9.3	9.1	4.1	1.2	4.5	3.3	7.8	4.5	---	---
5	10.2	9.9	9.8	8.8	2.5	1.2	4.8	2.7	7.5	4.9	---	---
6	9.9	9.3	10.0	9.5	3.0	1.4	6.0	2.5	8.3	5.0	---	---
7	9.9	9.8	10.0	9.9	3.1	1.6	4.8	4.1	7.3	2.3	11.2	8.3
8	9.9	9.8	9.9	9.3	2.0	1.4	4.3	1.1	2.1	.9	8.3	5.3
9	10.0	9.8	9.3	9.0	6.6	1.3	2.0	.6	2.6	1.1	6.0	4.3
10	9.9	9.6	9.1	8.8	6.1	4.7	3.3	1.8	2.9	.6	6.9	4.8
11	9.5	9.3	9.3	8.9	4.5	2.3	4.0	2.0	2.1	.7	7.1	5.6
12	9.7	9.5	8.9	8.5	4.2	1.7	3.3	2.6	1.7	.3	8.7	7.0
13	9.5	9.3	8.6	8.4	2.4	1.5	---	---	1.7	.7	8.9	5.9
14	9.7	9.5	9.1	8.6	3.8	1.8	---	---	1.3	.3	8.9	6.5
15	9.8	9.6	9.5	8.9	3.0	1.9	---	---	1.0	.7	10.4	6.4
16	10.0	9.6	9.6	9.2	3.1	1.7	---	---	1.0	.8	8.9	6.1
17	10.0	9.6	9.3	9.0	2.8	1.4	---	---	1.6	.8	8.6	5.4
18	9.8	9.6	9.1	8.7	6.4	1.8	---	---	2.1	1.1	8.4	6.6
19	9.7	9.5	8.7	8.3	6.4	4.1	---	---	1.7	.9	9.2	6.3
20	10.0	8.8	8.3	7.7	3.1	.9	5.0	4.2	1.7	.9	10.1	6.3
21	10.6	10.1	7.7	7.5	.8	.4	4.9	3.5	2.2	1.3	9.9	6.2
22	10.9	10.7	7.8	7.7	2.8	.5	5.1	3.3	2.1	1.1	8.8	6.2
23	10.7	10.5	7.8	7.7	2.8	1.0	3.8	2.3	2.4	1.5	9.8	8.1
24	10.5	10.2	7.8	7.6	4.1	1.0	3.6	2.1	4.2	2.2	9.6	7.2
25	10.2	10.0	7.8	7.3	3.4	2.0	3.6	2.0	6.3	4.8	9.5	7.8
26	10.2	9.9	7.5	7.2	4.2	2.1	5.4	3.3	7.6	6.2	9.7	8.1
27	10.2	10.1	7.3	7.1	3.8	2.3	5.6	3.2	8.1	7.5	9.6	8.0
28	10.1	9.8	7.3	6.8	9.4	6.8	5.3	3.6	9.7	7.8	9.7	7.8
29	9.8	9.4	7.1	6.5	7.8	6.2	5.9	2.7	---	---	10.0	8.5
30	9.5	9.3	6.6	5.9	8.8	4.9	6.3	3.7	---	---	10.0	8.3
31	---	---	6.2	5.3	---	---	6.9	4.2	---	---	---	---
MONTH	10.9	8.8	10.1	5.3	9.4	.4	7.9	.6	9.7	.3	11.2	4.3
YEAR	14.3	.3										

03159540 SHADE RIVER NEAR CHESTER, OH

LOCATION.--Lat 39°03'49", long 81°52'55", in NE 1/4 sec. 10, T.3N., R.12 W., Meigs County, Hydrologic Unit 05030202, on right bank at downstream side of bridge on Oak Hill Road, 200 ft (61 m) upstream from Sugar Run, 2.8 mi (4.5 km) southeast of Chester, and 8.5 mi (13.7 km) northeast of Pomeroy.

DRAINAGE AREA.--156 mi² (404 km²), includes that of Sugar Run.

PERIOD OF RECORD.--Water years 1956, 1962-64 (Occasional low-flow measurements), June 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 576.91 ft (175.842 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1970 to 1974.

AVERAGE DISCHARGE.--13 years, 168 ft³/s (4.758 m³/s), 14.62 in/yr (371 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,170 ft³/s (231 m³/s) May 25, 1968, gage height, 27.19 ft (8.348 m); minimum, 0.30 ft³/s (0.008 m³/s) Sept. 7, 8, 9, 10, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,400 ft³/s (68.0 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 9	---	2700	76.0	ice jam		June 9	1800	2520	71.4	15.91	4.849
Mar. 15	0300	*3630	103	*19.31	5.886						

Minimum discharge, 7.3 ft³/s (0.21 m³/s) Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	12	277	31	82	27	146	58	102	26	56	162
2	38	12	172	31	72	26	121	52	64	41	33	59
3	25	11	93	31	65	26	106	48	64	134	22	37
4	16	11	80	30	60	26	128	60	76	90	17	30
5	11	11	686	30	54	25	188	176	51	49	14	27
6	11	11	1300	44	52	25	136	123	41	38	16	21
7	18	13	224	91	48	25	181	84	40	31	20	17
8	21	16	113	654	45	25	148	139	106	32	30	14
9	136	16	254	2270	43	96	119	609	2140	488	20	12
10	85	30	274	1300	41	363	105	253	473	165	22	11
11	42	48	141	400	40	1040	99	147	144	97	105	10
12	27	36	118	350	38	1720	92	113	100	59	37	9.6
13	21	24	102	180	37	2230	81	494	121	42	108	9.5
14	18	19	176	100	36	3030	72	631	90	152	330	9.8
15	15	16	290	58	35	2960	63	381	69	101	146	10
16	19	15	170	50	34	731	50	240	66	54	71	12
17	23	92	122	44	33	539	58	283	72	48	42	13
18	20	172	102	40	32	315	81	205	55	36	33	12
19	18	73	87	37	32	263	190	148	50	29	25	13
20	18	45	80	35	31	234	152	115	46	26	22	10
21	18	38	72	33	30	211	131	96	49	28	23	9.2
22	16	37	66	32	30	282	122	81	41	22	19	26
23	14	34	60	31	29	218	104	74	37	19	14	23
24	13	31	64	120	29	186	95	113	32	34	12	13
25	13	28	50	420	28	277	92	121	29	50	11	10
26	13	27	45	1350	28	798	98	79	50	38	9.8	9.2
27	13	24	42	1300	28	1150	87	62	58	26	48	8.5
28	15	24	37	750	27	440	74	52	42	18	24	7.9
29	13	49	34	400	---	272	66	56	33	15	18	7.3
30	13	118	32	210	---	199	62	251	28	16	20	8.3
31	13	---	32	110	---	167	---	323	---	149	319	---
TOTAL	756	1093	5397	10562	1139	17926	3258	5667	4376	2153	1586.8	621.3
MEAN	24.4	36.4	174	341	40.7	578	109	183	146	69.5	54.4	20.7
MAX	136	172	1300	2270	82	3030	190	631	2140	488	330	162
MIN	11	11	32	30	27	25	58	48	28	15	9.8	7.3
CFSM	.16	.23	1.12	2.19	.26	3.71	.70	1.17	.94	.45	.35	.13
IN.	.18	.26	1.29	2.52	.27	4.27	.78	1.35	1.04	.51	.40	.15

CAL YR 1977 TOTAL 41348.3 MEAN 113 MAX 1920 MIN 3.0 CFSM .72 IN 9.86
WTR YR 1978 TOTAL 54635.1 MEAN 150 MAX 3030 MIN 7.3 CFSM .96 IN 13.03

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH

LOCATION.--Lat 39°21'05", long 82°18'47", in NW 1/4 sec. 11, T.11 N., R.16 W., Vinton County, Hydrologic Unit 05090101, on right bank 250 ft (76 m) upstream from Big Four Hollow Creek, 150 ft (46 m) downstream from Morgan Hollow Creek, 2.5 mi (4.0 km) southwest of Carbondale, and 3.7 mi (6.0 km) northeast of Lake Hope.

DRAINAGE AREA.--0.98 mi² (2.54 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder with concrete weir and 6-inch Parshall flume. Altitude of gage is 770.0 ft (234.70 m), from topographic map.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--8 years, 1.08 ft³/s (0.0306 m³/s), 14.97 in/yr (380 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 990 ft³/s (28.0 m³/s) June 22, 1974, gage-height, 5.01 ft (1.527 m) from rating curve extended above 30 ft³/s (0.85 m³/s); minimum, 0.02 ft³/s (0.001 m³/s) Sept. 24, 25, 1971, June 30, July 1, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 49 ft³/s (1.39 m³/s) July 2, gage height, 2.48 ft (0.756 m), no peaks above base of 50 ft³/s (1.42 m³/s); minimum, 0.02 ft³/s (0.001 m³/s) June 30, July 1, Sept. 23-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.43	.06	.40	.10	.20	.05	1.0	.69	.22	.10	.09	.10
2	.21	.05	1.2	.09	.08	.05	.65	.57	.22	3.2	.07	.09
3	.09	.06	.40	.08	.07	.05	.67	.56	.27	1.6	.08	.09
4	.07	.06	.28	.08	.06	.05	.76	3.5	.20	.35	.06	.07
5	.06	.08	5.3	.08	.06	.05	.94	2.7	.19	.19	.12	.05
6	.16	.12	.94	.08	.06	.05	1.2	1.5	.15	.18	.11	.05
7	.09	.10	.59	.78	.06	.05	1.5	1.3	.31	.16	.09	.05
8	.30	.06	.60	11	.05	.05	1.2	8.8	.42	.41	.07	.05
9	.30	.06	.26	3.6	.05	.60	1.0	5.7	.47	.21	.07	.04
10	.13	.23	1.2	1.4	.05	1.7	1.0	2.2	.18	.16	.30	.04
11	.10	.12	2.4	.88	.05	3.4	.94	1.7	.18	.12	.11	.05
12	.08	.08	.83	.78	.05	11	.64	1.4	.27	.11	.10	.05
13	.07	.07	.83	.79	.05	11	.56	6.3	.20	.13	.18	.04
14	.08	.12	4.3	.59	.05	22	.42	4.7	.13	.20	.11	.10
15	.09	.12	2.0	.35	.05	8.9	.36	2.7	.14	.12	.11	.15
16	.11	.37	.78	.25	.05	5.2	.29	2.2	.14	.11	.11	.60
17	.07	.20	.15	.20	.05	2.1	.21	1.6	.12	.09	.08	.15
18	.08	.13	.02	.17	.05	1.9	.79	1.2	.13	.07	.05	.08
19	.10	.10	.11	.16	.05	1.7	2.3	.96	.25	.08	.06	.06
20	.07	.15	.11	.15	.05	1.5	2.3	.78	.13	.09	.05	.05
21	.06	.13	.10	.14	.05	1.5	1.7	.62	.13	.08	.04	.03
22	.05	.14	.35	.15	.05	1.3	1.3	.46	.10	.07	.05	.03
23	.06	.12	.30	.34	.05	1.1	1.3	.42	.09	.09	.04	.02
24	.06	.12	.19	.76	.05	.93	1.2	.43	.10	.17	.05	.02
25	.07	.09	.15	15	.05	3.0	2.1	.36	.10	.11	.04	.02
26	.11	.10	.12	21	.05	8.0	1.8	.37	.35	.10	.04	.02
27	.08	.07	.11	7.5	.05	5.0	1.4	.37	.08	.09	.04	.02
28	.05	.10	.11	5.0	.05	2.5	1.1	.33	.04	.06	.06	.02
29	.06	.16	.10	2.0	---	1.6	1.0	.32	.05	.06	.09	.02
30	.09	1.4	.10	.50	---	1.2	.92	.34	.04	.12	.27	.02
31	.08	---	.10	.26	---	1.2	---	.27	---	.19	.36	---
TOTAL	3.46	4.77	24.43	74.26	1.64	98.73	32.15	55.35	5.40	8.82	3.10	2.18
MEAN	.11	.16	.79	2.40	.059	3.18	1.07	1.79	.18	.28	.10	.073
MAX	.43	1.4	5.3	21	.20	22	2.3	8.8	.47	3.2	.36	.60
MIN	.05	.05	.02	.08	.05	.05	.21	.27	.04	.06	.04	.02
CFSM	.11	.16	.81	2.45	.06	3.25	1.09	1.83	.18	.29	.10	.07
IN.	.13	.18	.93	2.82	.06	3.74	1.22	2.10	.20	.33	.12	.08

CAL YR 1977 TOTAL 271.48 MEAN .74 MAX 15 MIN .02 CFSM .76 IN 10.29
WTR YR 1978 TOTAL 314.29 MEAN .86 MAX 22 MIN .02 CFSM .88 IN 11.92

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970 to 1978 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1971 to September 1978 (discontinued).
pH: January 1971 to September 1978 (discontinued).
WATER TEMPERATURES: January 1971 to September 1978 (discontinued).

INSTRUMENTATION.--Water-quality monitor since January 1971.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 3,100 micromhos Oct. 21, 22, 1971; minimum, 90 micromhos July 11, 1976.
pH: Maximum, 7.5 units Dec. 6, 1971; minimum, 1.9 units Apr. 10, 1973.
WATER TEMPERATURES: Maximum, 33.5°C Aug. 2, 1972; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded 2,600 micromhos Sept. 28; minimum recorded 180 micromhos May 8.
pH: Maximum recorded 6.4 units July 8; minimum recorded 2.5 units Oct. 4, Nov. 2-5.
WATER TEMPERATURES: Maximum, 26.0°C June 26; minimum, 0.0°C on many days during winter period.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	2380	504	2170	2110	843	627	---	---	885	642	1060	858
2	1810	1050	2230	2160	768	642	---	---	924	654	1200	852
3	1750	1570	2250	2180	831	651	---	---	822	576	1370	987
4	2150	1750	2190	2140	849	804	---	---	996	750	975	897
5	1910	1810	2190	2110	927	291	1500	1360	1090	915	1018	906
6	2050	1200	2240	1940	465	369	1360	1090	837	738	939	753
7	2020	1690	2170	2000	582	453	1130	576	858	762	912	786
8	2140	912	2160	2080	1030	339	648	264	1010	804	1210	924
9	1420	777	2080	2050	933	399	---	---	1080	954	1020	939
10	1580	1250	2050	789	543	450	---	---	1100	879	879	396
11	1520	1420	1630	1520	1030	561	837	552	1070	843	570	402
12	1620	1520	2030	1610	1260	915	984	843	1010	846	489	350
13	1860	1620	2450	2010	984	462	1020	885	1440	1020	420	350
14	2060	1680	2130	1500	447	318	---	---	1250	906	372	327
15	2080	1900	1520	702	459	312	---	---	945	867	387	345
16	1810	1550	---	---	804	462	---	---	870	678	459	357
17	1820	1750	1180	1140	---	---	---	---	---	---	456	363
18	2090	1800	1270	1150	---	---	---	---	---	---	699	360
19	1910	1720	1360	1270	---	---	---	---	---	---	696	327
20	1820	1760	1830	1360	---	---	---	---	---	---	624	363
21	1840	1800	1750	1200	---	---	---	---	---	---	612	459
22	1980	1830	1820	1250	---	---	---	---	---	---	618	357
23	2020	1970	1870	1740	---	---	---	---	1410	945	579	507
24	2030	2000	1730	1490	---	---	---	---	1090	855	705	501
25	2120	2000	1940	1430	---	---	---	---	1210	966	705	285
26	2200	2050	1420	1420	---	---	---	---	978	954	288	204
27	2130	2040	---	---	---	---	---	---	1110	843	342	237
28	2010	1990	---	---	---	---	---	---	1168	939	510	342
29	2010	1980	1290	1150	---	---	---	---	---	---	471	426
30	2060	2000	1550	492	---	---	---	---	---	---	693	435
31	2130	2070	---	---	---	---	801	588	---	---	762	636
MONTH	2380	504	2450	492	1260	291	1500	264	1440	576	1370	204

RACCOON CREEK BASIN

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	717	594	657	594	---	---	---	---	1740	1600	1660	1430
2	585	483	762	603	---	---	---	---	2040	1740	2190	1690
3	798	489	933	699	---	---	525	411	2090	2000	2180	2000
4	831	735	936	246	---	---	729	534	2030	1970	2210	2000
5	705	567	324	276	---	---	930	732	2040	1070	2220	2030
6	840	393	369	333	---	---	1390	972	1880	1560	2210	2100
7	387	324	765	309	---	---	1520	1370	1960	1900	2300	2200
8	648	393	738	180	---	---	1540	285	1970	1910	2360	2240
9	804	603	321	225	---	---	1310	1080	2180	1970	2410	2320
10	825	735	342	246	---	---	1360	1310	2210	588	2450	2310
11	753	534	618	318	---	---	1400	1340	1700	1570	2530	2360
12	696	501	609	339	---	---	1760	1410	1800	1320	2500	2400
13	678	603	531	198	---	---	1800	1670	1710	630	2510	2400
14	660	543	288	261	---	---	1700	660	1550	1070	2490	960
15	990	714	366	291	---	---	1670	1520	1760	1420	---	---
16	1010	759	426	366	---	---	1730	1640	1910	1500	---	---
17	1040	840	513	414	---	---	1730	1640	1980	1600	---	---
18	1010	291	588	471	---	---	1730	1670	2000	1500	---	---
19	444	339	714	543	---	---	1970	1730	2120	2010	---	---
20	426	339	867	675	---	---	2030	1960	2160	2000	---	---
21	429	396	777	555	---	---	2050	1980	2280	2070	---	---
22	567	381	897	555	---	---	2040	2000	2360	2200	---	---
23	687	579	879	498	---	---	2110	1630	2300	2190	---	---
24	639	552	726	567	---	---	1860	771	2360	2270	---	---
25	618	348	654	549	---	---	1950	1500	2390	2300	---	---
26	498	396	918	666	---	---	2030	1910	2420	2350	2420	2300
27	552	468	1070	819	---	---	2050	1960	2510	2400	2580	2440
28	621	456	1130	921	1490	1290	1960	1920	2520	2360	2600	2470
29	732	558	1090	639	1810	1480	2160	1950	2310	1620	2500	2360
30	690	651	---	---	1840	1500	2150	1270	2190	549	2590	2440
31	---	---	---	---	---	---	1640	702	1400	462	---	---
MONTH	1040	291	1130	180	1840	1290	2160	285	2520	462	2600	960
YEAR	2600	180										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	4.1	2.6	2.8	2.6	3.8	3.4	---	---	3.5	3.3	3.3	3.1
2	3.1	2.8	2.8	2.5	3.8	3.6	---	---	3.5	3.2	3.4	3.1
3	2.9	2.8	2.7	2.5	3.9	3.5	---	---	3.6	3.4	3.2	3.0
4	2.9	2.5	2.6	2.5	3.6	3.5	---	---	3.4	3.2	3.3	3.1
5	2.9	2.7	2.7	2.5	4.2	3.6	3.0	2.9	3.4	3.1	3.4	3.1
6	3.1	2.7	2.7	2.6	4.7	4.2	3.1	3.0	3.5	3.3	3.3	3.1
7	2.9	2.8	2.7	2.6	4.3	3.9	4.1	3.2	3.5	3.3	3.5	3.4
8	3.5	2.8	2.7	2.6	3.9	3.1	5.7	3.6	3.5	3.0	3.4	3.2
9	3.6	2.9	2.7	2.6	5.5	3.2	---	---	3.3	2.9	---	---
10	3.1	2.9	3.6	2.7	4.1	3.9	---	---	3.3	2.9	---	---
11	3.1	2.9	3.0	3.0	3.9	3.5	3.7	3.3	3.4	3.1	---	---
12	3.0	2.9	3.0	2.9	3.4	3.3	3.4	3.2	3.4	3.0	---	---
13	3.0	2.9	2.9	2.7	5.6	3.4	3.3	3.2	3.2	2.9	---	---
14	3.0	2.8	2.9	2.7	5.7	4.7	3.4	3.2	3.3	3.0	---	---
15	2.9	2.7	3.6	2.9	5.3	4.2	3.5	3.4	3.3	3.1	---	---
16	3.0	2.9	---	---	4.1	2.8	3.6	3.5	3.5	3.2	---	---
17	3.0	2.9	3.2	3.1	---	---	3.6	3.1	3.5	3.5	---	---
18	3.0	2.7	3.2	3.1	---	---	3.4	3.1	---	---	---	---
19	2.9	2.8	3.2	3.0	---	---	3.6	3.2	---	---	---	---
20	3.0	2.8	3.1	2.8	---	---	3.3	3.1	---	---	---	---
21	3.0	2.7	3.1	2.9	---	---	3.5	3.3	---	---	---	---
22	2.9	2.7	3.1	2.9	---	---	3.6	3.4	---	---	---	---
23	2.8	2.7	2.9	2.8	---	---	3.6	2.6	---	---	---	---
24	2.9	2.7	3.0	2.8	---	---	4.1	2.6	3.8	3.6	---	---
25	2.8	2.7	3.1	2.9	---	---	4.9	4.1	3.5	3.1	---	---
26	2.8	2.6	3.1	3.1	---	---	---	---	3.3	3.2	---	---
27	2.9	2.7	---	---	---	---	---	---	3.4	2.9	---	---
28	2.9	2.7	---	---	---	---	---	---	3.2	3.0	---	---
29	2.9	2.7	3.3	3.1	---	---	---	---	---	---	---	---
30	2.9	2.7	4.7	3.2	---	---	---	---	---	---	---	---
31	2.9	2.7	---	---	---	---	3.5	3.3	---	---	---	---
MONTH	4.1	2.5	4.7	2.5	5.7	2.8	5.7	2.6	3.8	2.9	3.5	3.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	3.9	3.6	3.5	3.3	---	---	3.2	3.0	3.3	3.1
2	---	---	3.8	3.5	3.4	3.3	---	---	3.2	2.9	3.2	3.0
3	---	---	3.7	3.4	3.7	3.3	4.2	3.9	3.1	3.0	3.2	3.0
4	---	---	5.3	3.5	3.5	3.3	4.1	3.7	3.1	3.0	3.1	3.0
5	3.7	3.6	5.4	5.0	3.4	3.2	3.7	3.4	3.6	3.1	3.2	3.0
6	4.8	3.4	5.0	4.5	3.4	3.3	3.4	3.1	3.2	3.0	3.1	2.9
7	5.5	4.6	4.5	3.6	3.5	3.2	3.3	3.1	3.1	3.0	3.1	2.9
8	4.5	3.6	6.2	3.6	6.2	3.2	6.4	3.2	3.1	3.0	3.1	2.9
9	3.8	3.4	4.6	4.1	6.3	3.5	3.5	3.2	3.1	2.9	3.0	2.8
10	3.9	3.3	5.1	4.5	3.7	3.4	3.3	3.2	4.3	3.0	3.0	2.9
11	3.8	3.4	4.6	3.7	3.4	3.2	3.4	3.2	3.2	3.1	3.0	2.9
12	4.6	3.5	5.2	3.9	4.1	3.2	3.4	3.1	3.1	2.9	3.0	2.9
13	3.7	3.5	6.2	4.1	3.6	3.5	3.3	3.2	3.9	3.0	3.0	2.9
14	3.9	3.7	5.3	4.7	3.6	3.5	4.2	3.1	3.3	3.0	3.9	3.0
15	3.6	3.2	4.9	4.5	3.4	3.3	3.3	3.1	3.1	2.9	---	---
16	3.7	3.3	4.5	4.2	3.4	3.2	3.2	3.0	3.1	2.9	---	---
17	3.6	3.2	4.3	4.0	3.3	3.2	3.3	3.0	3.1	2.9	---	---
18	4.9	3.4	4.1	3.8	3.3	3.1	3.3	3.0	3.1	2.9	---	---
19	5.1	3.8	3.9	3.5	4.2	3.3	3.2	3.0	3.1	2.8	---	---
20	4.9	4.0	3.7	3.4	3.3	3.1	3.1	3.0	3.1	2.9	---	---
21	4.1	3.9	3.9	3.6	3.3	3.1	3.1	2.9	3.1	2.9	---	---
22	4.3	3.5	4.0	3.5	3.3	3.2	3.1	2.9	3.1	2.8	---	---
23	3.5	3.3	4.2	3.6	3.3	3.1	3.2	2.9	3.1	2.9	---	---
24	3.5	3.3	3.8	3.6	3.2	3.1	3.9	3.1	3.0	2.8	---	---
25	5.3	3.3	3.9	3.5	3.2	3.0	3.2	3.0	3.0	2.8	---	---
26	4.4	3.7	3.7	3.3	4.0	3.1	3.1	2.9	3.0	2.9	---	---
27	3.8	3.6	3.5	3.2	3.3	3.0	3.1	3.0	3.0	2.9	---	---
28	3.8	3.5	3.4	3.1	3.2	3.0	3.1	2.9	3.0	2.8	---	---
29	3.8	3.5	3.6	3.2	3.2	2.9	3.1	3.0	3.2	2.9	---	---
30	3.7	3.5	3.7	3.4	3.2	3.1	3.4	3.0	5.1	3.0	---	---
31	---	---	3.6	3.4	---	---	4.1	3.1	6.2	3.3	---	---
MONTH	5.5	3.2	6.2	3.1	6.3	2.9	6.4	2.9	6.2	2.8	3.9	2.8
YEAR	6.4	2.5										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	18.5	14.5	13.5	9.5	8.0	4.0	---	---	1.5	.0	4.0	1.5
2	16.0	12.5	13.5	8.0	6.0	3.0	---	---	2.5	.5	2.0	1.0
3	14.0	10.0	16.0	10.5	5.0	2.0	---	---	1.0	.0	4.0	1.5
4	14.5	9.0	16.5	13.0	5.0	3.0	---	---	1.5	.0	3.5	1.0
5	14.5	9.5	17.5	13.0	---	---	1.0	.5	2.5	1.0	2.0	.5
6	15.0	11.0	16.0	14.0	3.0	.0	2.0	1.0	1.0	.0	3.0	1.0
7	13.0	8.0	16.0	13.0	.0	.0	2.5	1.0	.5	.0	2.5	1.5
8	13.0	11.0	16.5	14.0	1.5	.0	2.0	1.5	1.0	.0	3.5	2.0
9	13.5	10.5	16.5	13.0	2.0	1.0	---	---	1.5	.0	3.5	.5
10	13.5	10.0	15.0	4.5	1.5	1.5	---	---	1.0	.0	3.5	.0
11	12.0	7.5	6.5	3.0	1.5	1.0	.0	.0	1.0	.0	4.0	.0
12	10.5	7.0	5.5	3.0	2.0	1.0	1.5	.0	1.5	.0	---	---
13	11.0	8.5	8.0	4.0	2.5	1.0	2.5	1.5	3.0	.0	---	---
14	11.0	7.0	9.5	7.5	6.0	1.5	2.5	1.0	3.0	.5	---	---
15	12.0	6.0	10.0	8.5	6.0	3.5	1.5	.0	1.0	.0	4.5	3.0
16	9.5	7.0	---	---	3.0	2.5	.0	.0	3.0	.5	5.0	2.0
17	8.5	4.5	9.0	5.5	---	---	2.5	.0	---	---	5.0	1.5
18	11.0	6.0	6.5	3.5	---	---	2.0	.5	---	---	7.0	.5
19	11.0	8.0	6.5	2.0	---	---	1.0	.0	---	---	8.0	2.5
20	10.5	6.0	8.0	4.0	---	---	2.5	.0	---	---	10.0	1.0
21	11.0	6.0	9.0	7.0	---	---	1.5	.0	---	---	7.5	4.0
22	12.5	6.5	7.0	5.0	---	---	.5	.0	---	---	12.0	2.0
23	13.0	9.0	10.0	6.0	---	---	1.5	.0	---	---	11.0	5.0
24	13.0	8.0	9.0	4.5	---	---	2.0	.5	1.0	.0	7.5	4.5
25	13.0	9.5	6.5	1.5	---	---	1.5	1.5	3.5	1.0	6.0	4.0
26	15.0	11.5	1.0	1.0	---	---	---	---	3.0	1.0	6.0	5.0
27	---	---	---	---	---	---	---	---	3.0	.5	5.0	4.5
28	14.0	10.5	---	---	---	---	---	---	4.5	1.0	12.0	4.0
29	12.5	8.0	1.5	1.0	---	---	---	---	---	---	13.0	4.0
30	12.0	7.5	6.0	2.0	---	---	---	---	---	---	12.0	1.5
31	12.0	7.0	---	---	---	---	2.0	.5	---	---	16.0	5.5
MONTH	18.5	4.5	17.5	1.0	8.0	.0	2.5	.0	4.5	.0	16.0	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	17.5	7.0	17.5	5.5	23.5	13.5	---	---	22.5	17.0	21.0	16.5
2	12.0	6.0	18.5	4.5	20.5	15.0	---	---	23.5	18.0	21.5	16.0
3	13.0	6.5	18.0	5.0	21.0	15.0	19.0	18.0	22.5	18.5	21.5	16.0
4	14.0	8.0	9.5	9.0	19.5	11.5	19.5	17.5	22.0	18.5	20.5	17.5
5	16.5	8.5	10.0	9.0	20.5	13.0	21.0	17.0	20.0	18.5	20.0	16.0
6	14.0	8.0	11.0	8.0	19.0	13.0	24.0	16.0	22.0	18.5	21.0	16.5
7	18.0	8.0	13.5	8.0	20.0	14.5	23.5	17.0	22.5	19.0	21.5	17.0
8	14.0	7.5	16.0	10.0	22.0	17.0	24.5	18.0	22.5	17.5	22.0	18.0
9	15.5	6.5	14.0	10.0	22.0	15.5	25.5	17.5	23.0	18.0	22.0	18.5
10	20.0	7.5	14.0	9.0	22.0	12.5	23.5	19.0	22.5	19.0	22.5	19.0
11	14.0	8.5	20.0	8.0	22.5	13.0	21.5	16.0	20.5	18.5	22.0	19.0
12	18.5	5.5	14.0	12.0	22.0	15.0	22.0	14.5	22.5	18.5	22.0	18.5
13	18.0	7.5	14.0	12.0	16.5	13.5	19.5	15.0	23.5	19.5	22.0	20.0
14	16.5	4.5	14.0	10.5	20.5	10.0	25.0	17.5	24.0	19.0	22.5	20.0
15	17.0	5.5	11.0	10.0	23.0	15.0	23.0	17.0	24.0	18.5	---	---
16	14.0	4.0	12.5	10.0	20.5	13.5	23.5	18.0	23.5	19.0	---	---
17	17.5	4.0	15.5	10.5	22.0	15.0	22.0	16.0	23.0	19.0	---	---
18	12.0	8.0	20.5	10.0	23.5	16.0	22.0	15.5	24.0	19.5	---	---
19	12.5	8.0	22.0	11.0	22.5	18.0	23.0	16.5	24.0	19.0	---	---
20	8.5	7.0	21.5	11.0	22.5	15.5	23.0	17.5	22.0	19.0	---	---
21	8.0	6.5	19.5	12.0	22.0	16.5	24.0	18.5	21.5	18.0	---	---
22	16.0	4.0	18.5	9.5	21.0	14.5	24.5	19.0	21.5	16.5	---	---
23	9.5	6.5	17.0	12.0	20.5	13.5	24.5	19.0	22.0	17.5	---	---
24	16.5	6.5	17.0	14.0	21.5	14.5	24.5	20.0	22.5	18.0	---	---
25	10.0	8.5	22.0	13.0	21.5	15.0	21.5	19.0	22.5	19.0	---	---
26	12.5	8.0	23.0	14.5	26.0	18.0	24.0	18.0	21.5	19.5	22.5	14.0
27	18.0	6.0	22.5	12.0	25.5	18.5	22.5	18.5	23.0	20.0	18.5	13.5
28	18.5	5.5	22.5	13.0	24.5	19.0	22.5	18.5	24.0	19.5	17.0	14.5
29	17.5	6.0	19.0	13.5	25.0	18.5	22.0	18.0	23.5	20.0	16.0	12.5
30	19.0	8.5	20.0	14.0	19.0	17.0	20.0	18.5	22.0	20.5	17.5	13.5
31	---	---	23.5	14.0	---	---	22.5	18.5	20.5	19.0	---	---
MONTH	20.0	4.0	23.5	4.5	26.0	10.0	25.5	14.5	24.0	16.5	22.5	12.5
YEAR	26.0	.0										

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH

LOCATION.--Lat 39°21'48", long 82°18'51", in SE 1/4 NE 1/4 sec. 11, T.11 N., R.16 W., Vinton County, Hydrologic Unit 05090101, on right bank 200 ft (61 m) upstream from State Route 278 crossing, 300 ft (91 m) upstream from Sandy Run, 2.5 mi (4.0 km) southwest of Carbondale, and 3.7 mi (6.0 km) northeast of Lake Hope.

DRAINAGE AREA.--1.01 mi² (2.62 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder with concrete weir and 6-inch Parshall flume. Altitude of gage is 770.0 ft (234.70 m), from topographic map.

REMARKS.--Records fair..

AVERAGE DISCHARGE.--8 years, 1.05 ft³/s (0.0297 m³/s), 14.12 in/yr (359 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,200 ft³/s (34.0 m³/s) June 22, 1975, gage height, 4.72 ft (1.439 m) from rating curve extended above 30 ft³/s (0.85 m³/s); no flow July 30 to Aug. 3, 1975, Sept. 8-14, 27-30, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 54 ft³/s (1.53 m³/s) July 2 (base, 50 ft³/s, 1.42 m³/s), gage height, 2.42 ft (0.738 m); minimum, 0.01 ft³/s many days during Oct., Aug., Sept.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.34	.22	1.4	.10	.20	.06	.91	.64	.20	.10	.06	.09
2	.11	.14	.50	.09	.08	.06	.72	.53	.17	3.7	.03	.05
3	.04	.03	.41	.08	.07	.06	.64	.45	.21	1.6	.03	.04
4	.02	.03	.34	.08	.06	.06	.61	2.1	.15	.42	.02	.02
5	.02	.03	6.0	.08	.06	.06	.55	2.8	.13	.24	.06	.02
6	.16	.04	1.8	.08	.06	.06	.77	1.5	.11	.16	.06	.02
7	.09	.05	1.5	.67	.06	.06	1.4	1.0	.24	.12	.05	.02
8	.30	.03	.40	13	.06	.06	1.0	6.0	.27	.26	.03	.01
9	.30	.03	1.2	4.1	.06	.10	.88	9.2	.32	.17	.02	.02
10	.13	.12	.53	1.7	.06	1.5	.76	3.8	.16	.13	.13	.02
11	.10	.10	.34	1.1	.06	3.3	.74	2.2	.12	.09	.08	.02
12	.08	.08	.29	.80	.06	9.7	.60	2.1	.22	.07	.06	.01
13	.07	.06	.93	.74	.06	11	.50	11	.20	.06	.12	.01
14	.08	.06	4.4	.61	.06	20	.41	6.7	.13	.14	.08	.05
15	.09	.06	2.1	.35	.06	5.7	.36	4.0	.10	.08	.05	.14
16	.11	.09	1.1	.25	.06	3.4	.33	2.3	.09	.06	.04	.54
17	.07	.22	.75	.20	.06	2.8	.30	1.6	.08	.04	.03	.16
18	.08	.17	.59	.17	.06	1.9	2.1	1.2	.08	.03	.02	.08
19	.10	.11	.44	.16	.06	1.7	4.4	.96	.25	.03	.02	.06
20	.07	.10	.73	.15	.06	1.5	2.6	.76	.11	.02	.02	.05
21	.01	.14	.59	.14	.06	1.5	1.8	.63	.10	.02	.01	.03
22	.01	.14	.43	.15	.06	1.3	1.4	.50	.08	.02	.01	.03
23	.01	.13	.30	.38	.06	1.1	1.2	.64	.06	.02	.01	.02
24	.01	.12	.19	.62	.06	.93	1.1	.73	.05	.08	.01	.02
25	.01	.11	.15	8.1	.06	3.0	2.1	.49	.04	.06	.01	.02
26	.02	.10	.12	14	.06	8.1	2.2	.41	.33	.04	.01	.02
27	.02	.07	.11	5.6	.06	4.8	1.5	.34	.10	.03	.01	.02
28	.02	.09	.11	4.5	.06	2.5	1.0	.30	.07	.02	.01	.02
29	.01	.10	.10	1.6	---	1.7	.95	.30	.05	.02	.03	.02
30	.04	.91	.10	.50	---	1.2	.83	.29	.04	.05	.16	.02
31	.23	---	.10	.26	---	1.1	---	.25	---	.13	.36	---
TOTAL	2.75	3.68	28.05	60.36	1.85	90.31	34.66	65.72	4.26	8.01	1.64	1.65
MEAN	.089	.12	.90	1.95	.066	2.91	1.16	2.12	.14	.26	.053	.055
MAX	.34	.91	6.0	14	.20	20	4.4	11	.33	3.7	.36	.54
MIN	.01	.03	.10	.08	.06	.06	.30	.25	.04	.02	.01	.01
CFSM	.09	.12	.89	1.93	.07	2.88	1.15	2.10	.14	.26	.05	.05
IN.	.10	.14	1.03	2.22	.07	3.32	1.28	2.42	.16	.29	.06	.06

CAL YR 1977 TOTAL 201.15 MEAN .55 MAX 9.8 MIN .00 CFSM .55 IN 7.40
WTR YR 1978 TOTAL 302.94 MEAN .83 MAX 20 MIN .01 CFSM .82 IN 11.15

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970 to 1974, 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1971 to current year.
pH: January 1971 to current year.
WATER TEMPERATURES: January 1971 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 3,530 micromhos Sept. 13, 1973; minimum, 72 micromhos Oct. 17, 1975.
pH: Maximum, 6.7 units Jan. 8, 1978; minimum, 2.1 units on several days during October and December 1971, February and March 1972, December 1973.
WATER TEMPERATURES: Maximum, 38.5°C Aug. 12, 1973; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1730 micromhos Sept. 12; minimum, 114 micromhos Jan. 9.
pH: Maximum, 6.7 units Jan. 8; minimum, 2.9 units Dec. 13, June 1, 18.
WATER TEMPERATURES: Maximum, 29.5°C July 22; minimum 0.0°C on many days during winter period.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	894	603	867	858	453	354	600	507	---	---	582	558
2	777	672	888	867	510	456	585	528	---	---	609	582
3	798	780	882	873	519	489	648	582	---	---	588	573
4	816	801	876	867	549	513	732	624	444	423	594	576
5	831	819	870	867	552	156	636	597	441	417	639	597
6	831	732	870	828	357	264	594	504	450	432	618	537
7	810	780	846	825	420	366	498	339	468	453	564	540
8	804	660	855	846	441	387	333	174	474	468	558	543
9	675	597	861	852	381	279	183	114	483	474	546	396
10	705	669	858	747	411	375	---	---	504	483	438	267
11	729	708	786	774	456	417	---	---	528	501	324	219
12	750	729	795	786	486	432	408	393	513	495	237	171
13	765	750	807	795	432	273	414	405	510	498	219	147
14	780	765	810	804	267	204	435	414	519	501	171	132
15	795	771	822	807	339	258	459	435	534	519	210	174
16	774	738	819	762	402	342	474	459	537	522	225	210
17	804	774	750	651	450	402	468	453	525	522	243	213
18	813	792	768	684	492	450	474	459	531	525	273	243
19	792	777	789	771	522	492	474	462	549	531	279	258
20	807	792	792	774	525	414	468	438	564	549	291	270
21	822	807	774	714	483	447	465	456	573	558	384	288
22	828	819	714	708	531	486	477	459	591	570	414	372
23	828	822	717	708	540	522	477	450	615	570	435	414
24	840	828	726	711	549	510	480	336	591	576	441	417
25	834	816	735	720	600	501	312	126	591	582	417	225
26	819	810	744	720	633	576	216	129	591	585	231	171
27	828	819	765	735	654	597	249	219	606	591	297	204
28	843	828	744	720	765	654	---	---	594	564	336	300
29	858	843	747	702	714	621	---	---	---	---	366	336
30	858	846	699	348	681	603	---	---	---	---	390	366
31	858	852	---	---	603	579	---	---	---	---	420	387
MONTH	894	597	888	348	765	156	732	114	615	417	639	132

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	438	414	576	537	780	636	---	---	993	939	---	---
2	429	411	549	531	756	729	---	---	1060	996	---	---
3	429	420	540	525	735	615	---	---	1240	1020	---	---
4	435	414	552	225	681	657	---	---	1400	1250	---	---
5	435	420	354	255	699	681	---	---	1370	1060	---	---
6	453	330	405	351	711	693	666	630	1100	1060	1370	1280
7	351	324	432	405	744	555	729	666	1100	1050	1440	1280
8	366	348	450	132	792	564	825	486	1110	1040	1500	1340
9	393	369	294	201	621	558	705	609	1140	1070	1550	1370
10	411	390	345	297	660	597	720	654	1260	765	1580	1390
11	441	411	390	345	684	663	786	723	990	942	1680	1460
12	450	435	408	318	696	615	834	789	1020	990	1730	1530
13	471	447	336	168	669	645	864	837	1050	729	1690	1530
14	465	456	276	237	702	666	939	672	939	882	1680	1190
15	471	456	324	279	726	705	855	819	960	909	1170	738
16	477	465	366	327	744	726	873	852	1020	942	1220	357
17	486	471	399	366	786	744	927	876	1060	993	909	723
18	507	264	435	399	924	573	948	927	1150	1020	978	909
19	270	252	471	435	729	648	963	927	1230	1150	1040	981
20	321	258	507	468	762	732	990	948	1380	1200	1070	1030
21	363	324	516	495	759	732	1020	981	1430	1340	1110	1060
22	390	363	528	513	792	744	1050	1010	1550	1410	1150	1070
23	396	375	528	414	804	786	1130	1030	1600	1420	1180	1130
24	420	387	483	441	---	---	1210	903	1620	1420	1160	1120
25	417	273	531	474	---	---	1010	933	1620	1360	1240	1130
26	348	294	558	531	---	---	1030	1010	1650	1470	1380	1220
27	390	351	588	558	---	---	1080	1010	1640	1500	1350	1280
28	471	384	609	588	---	---	1150	1070	---	---	1490	1230
29	1010	453	660	546	---	---	1200	1100	---	---	1610	1360
30	660	555	624	579	---	---	1230	1070	---	---	1600	1500
31	---	---	636	603	---	---	1100	843	---	---	---	---
MONTH	1010	252	660	132	924	555	1230	486	1650	729	1730	357
YEAR	1730	114										

03201700 BIG POOR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	4.0	3.7	4.0	3.8	5.1	4.4	3.9	3.7	---	---	---	---
2	3.9	3.8	4.0	3.7	4.3	3.9	3.9	3.8	---	---	---	---
3	4.0	3.9	3.9	3.8	4.1	3.8	3.9	3.7	---	---	---	---
4	4.0	3.8	3.9	3.8	4.0	3.8	3.9	3.3	---	---	---	---
5	3.9	3.8	3.9	3.8	5.9	3.7	4.0	3.5	---	---	---	---
6	3.9	3.8	3.9	3.9	5.3	4.5	3.9	3.7	---	---	---	---
7	4.0	3.8	3.9	3.9	4.4	3.7	5.6	3.9	---	---	---	---
8	4.0	3.9	3.9	3.9	4.3	2.9	6.7	5.6	---	---	---	---
9	4.1	3.9	4.0	3.8	5.3	3.0	5.7	5.5	---	---	3.9	3.0
10	4.0	3.9	4.1	3.5	4.8	4.2	---	---	---	---	5.2	3.2
11	4.0	3.9	3.5	3.4	4.4	3.7	---	---	---	---	5.5	4.6
12	4.0	3.9	3.5	3.4	4.2	3.1	4.3	3.7	---	---	5.7	5.4
13	4.0	3.9	3.5	3.4	4.6	2.9	4.4	4.3	---	---	5.8	5.4
14	4.0	3.9	3.5	3.4	4.8	3.4	4.4	4.3	---	---	5.7	5.2
15	4.0	3.8	3.5	3.3	4.6	3.4	4.3	4.2	---	---	5.4	5.0
16	4.0	3.9	3.4	3.3	4.0	3.7	4.2	4.2	3.6	3.1	5.3	4.7
17	4.1	3.9	3.5	3.4	4.0	3.8	4.2	4.2	3.8	3.5	5.5	4.9
18	4.0	3.8	3.5	3.3	3.9	3.6	4.2	4.1	3.8	3.6	4.9	4.2
19	4.0	3.9	3.4	3.3	---	---	4.2	4.2	3.9	3.6	4.7	4.5
20	4.0	3.9	3.4	3.3	---	---	4.3	4.2	3.8	3.6	4.5	4.3
21	4.0	3.8	3.4	3.3	---	---	4.2	4.2	3.8	3.6	4.3	3.8
22	4.0	3.8	3.6	3.4	---	---	4.2	4.2	3.7	3.6	3.9	3.7
23	3.9	3.8	3.5	3.4	---	---	4.3	4.2	3.7	3.5	3.7	3.6
24	4.0	3.8	3.5	3.5	---	---	4.6	4.1	3.7	3.5	3.7	3.7
25	3.9	3.8	4.0	3.9	---	---	6.6	4.7	3.6	3.5	5.3	3.7
26	3.9	3.8	4.0	3.9	---	---	6.3	5.3	---	---	5.5	4.8
27	3.9	3.8	3.9	3.5	---	---	---	---	---	---	5.0	4.0
28	4.0	3.8	3.9	3.5	---	---	---	---	---	---	4.0	3.8
29	4.0	3.8	3.6	3.4	---	---	---	---	---	---	3.9	3.7
30	4.0	3.8	5.2	3.4	3.6	3.4	---	---	---	---	3.8	3.6
31	4.1	3.9	---	---	3.8	3.5	---	---	---	---	3.8	3.5
MONTH	4.1	3.7	5.2	3.3	5.9	2.9	6.7	3.3	3.9	3.1	5.8	3.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3.7	3.6	3.6	3.3	3.3	2.9	---	---	3.6	3.3	---	---
2	3.7	3.6	3.6	3.3	3.1	3.0	---	---	3.5	3.3	---	---
3	3.7	3.6	3.6	3.4	3.2	3.0	---	---	3.5	3.2	---	---
4	3.7	3.6	5.3	3.5	3.4	3.2	---	---	3.3	3.2	---	---
5	3.9	3.7	5.3	4.1	3.3	3.1	---	---	3.4	3.3	---	---
6	4.7	3.9	4.1	3.8	3.3	3.1	3.6	3.2	3.4	3.3	3.5	3.2
7	4.9	4.5	3.8	3.6	3.4	3.2	3.5	3.2	3.4	3.3	3.4	3.2
8	4.6	4.4	5.1	3.6	3.3	2.9	3.8	3.2	3.5	3.3	3.4	3.1
9	4.5	4.3	5.1	4.2	3.4	3.2	3.6	3.4	3.5	3.3	3.3	3.1
10	4.4	4.2	4.2	3.9	3.5	3.2	3.6	3.4	3.7	3.3	3.3	3.1
11	4.3	4.2	4.0	3.5	3.4	3.1	3.7	3.5	3.6	3.5	3.3	3.1
12	4.3	4.1	4.3	3.7	3.3	3.1	3.7	3.5	3.6	3.4	3.3	3.1
13	4.3	4.1	6.1	4.1	3.4	3.2	3.6	3.5	3.8	3.5	3.2	3.0
14	4.3	4.1	5.3	4.5	3.4	3.2	3.7	3.4	3.6	3.4	3.3	3.1
15	4.3	4.1	4.5	4.1	3.3	3.2	3.6	3.3	3.6	3.4	3.8	3.3
16	4.3	4.1	4.1	3.9	3.3	3.2	3.5	3.4	3.5	3.3	4.6	3.4
17	4.3	4.1	3.9	3.7	3.3	3.1	3.6	3.4	3.5	3.3	3.9	3.5
18	6.4	4.1	3.8	3.5	3.3	2.9	3.6	3.4	3.5	3.2	3.6	3.4
19	6.6	5.3	3.7	3.3	3.2	3.1	3.6	3.3	3.4	3.2	3.5	3.3
20	5.7	4.4	3.6	3.3	3.2	3.0	3.5	3.3	3.4	3.2	3.5	3.3
21	4.3	4.1	3.4	3.3	3.3	3.1	3.5	3.3	3.5	3.2	3.5	3.3
22	4.1	3.8	3.6	3.3	3.3	3.1	3.5	3.3	3.5	3.2	3.5	3.4
23	4.0	3.9	3.7	3.4	3.3	3.1	3.5	3.3	3.5	3.2	3.6	3.4
24	4.0	3.6	3.6	3.5	---	---	3.4	3.2	3.4	3.1	3.5	3.4
25	5.7	3.8	3.5	3.2	---	---	3.4	3.3	3.3	3.0	3.6	3.4
26	4.9	4.0	3.5	3.2	---	---	3.4	3.3	3.4	3.0	3.7	3.5
27	4.2	3.7	3.4	3.1	---	---	3.4	3.3	3.3	3.0	3.6	3.4
28	4.0	3.5	3.3	3.1	---	---	3.5	3.3	---	---	3.6	3.4
29	3.8	3.0	3.5	3.1	---	---	3.5	3.3	---	---	3.6	3.4
30	3.5	3.2	3.3	3.1	---	---	3.4	3.4	---	---	3.5	3.4
31	---	---	3.3	3.1	---	---	3.6	3.4	---	---	---	---
MONTH	6.6	3.0	6.1	3.1	3.5	2.9	3.8	3.2	3.8	3.0	4.6	3.0
YEAR	6.7	2.9										

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	20.5	16.0	15.5	9.5	8.0	4.5	2.0	1.0	---	---	1.5	.5
2	18.0	13.5	16.0	8.0	6.5	3.0	1.0	.5	---	---	.5	.5
3	15.5	10.0	17.5	11.0	5.0	2.0	1.0	.0	---	---	.5	.5
4	17.0	9.0	18.0	14.5	6.5	3.0	1.5	.0	.5	.5	1.0	.5
5	16.0	9.5	19.5	14.5	7.5	2.5	1.5	.5	.5	.5	.5	.5
6	18.5	12.0	17.5	15.5	4.5	.5	1.0	.5	.5	.5	1.0	.5
7	14.5	8.5	17.5	14.5	2.5	.5	1.0	.5	.5	.5	1.0	.5
8	14.5	12.0	17.5	15.5	3.0	.0	8.5	1.0	.5	.5	1.0	.5
9	14.5	11.5	19.0	13.5	3.0	.0	6.0	.5	.5	.5	1.5	.5
10	15.5	10.0	16.5	8.0	1.5	.0	---	---	.5	.5	2.0	.5
11	13.0	7.5	10.0	6.5	2.0	.0	---	---	.5	.5	2.0	.5
12	10.5	7.0	7.0	3.0	2.5	.5	.5	.5	.5	.5	3.0	.5
13	11.0	8.5	7.0	1.0	4.5	2.5	.5	.5	.5	.5	5.5	2.5
14	13.0	7.0	5.5	2.0	9.0	2.5	1.0	.5	.5	.5	4.0	3.0
15	14.0	5.5	10.5	3.5	8.0	4.5	1.0	1.0	.5	.5	4.5	3.0
16	10.5	7.0	10.5	8.0	4.5	2.0	1.0	.5	.5	.5	4.5	2.0
17	10.5	3.5	11.0	6.0	5.0	1.5	.5	.5	1.0	.5	5.0	1.0
18	12.5	6.0	7.0	3.0	5.5	3.0	1.0	.5	1.0	.5	6.0	.5
19	11.5	8.5	8.0	1.5	5.5	3.0	1.0	.5	.5	.5	8.0	2.0
20	12.0	5.5	8.5	4.0	4.0	2.5	.5	.5	.5	.5	9.5	1.0
21	14.0	5.5	10.0	7.0	4.0	2.5	.5	.5	1.0	.5	7.0	4.5
22	14.5	6.5	7.5	5.0	2.5	2.0	1.0	.5	.5	.5	11.5	3.0
23	14.5	9.5	10.5	6.0	3.0	1.5	.5	.5	.5	.5	10.5	5.0
24	15.5	8.5	10.0	4.5	4.0	1.5	.5	.5	.5	.5	7.5	4.5
25	13.5	10.5	6.5	3.0	3.5	1.0	1.0	.5	1.0	.5	6.5	4.5
26	16.5	12.0	3.0	.0	1.0	.5	1.0	.5	1.0	.5	6.0	5.5
27	18.0	12.0	.0	.0	1.0	.5	1.0	.5	1.0	.5	5.5	5.0
28	16.5	11.0	4.5	.0	.5	.0	---	---	1.0	.5	11.5	4.5
29	15.0	7.5	2.5	.0	1.5	.5	---	---	---	---	12.0	4.5
30	14.5	6.5	5.5	2.0	1.5	1.0	---	---	---	---	11.5	2.5
31	12.5	6.5	---	---	2.0	1.0	---	---	---	---	15.0	5.5
MONTH	20.5	3.5	19.5	.0	9.0	.0	8.5	.0	1.0	.5	15.0	.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	16.0	7.0	17.5	5.5	25.0	15.0	---	---	24.0	17.0	---	---
2	13.5	6.5	17.5	5.5	22.5	17.0	---	---	26.0	18.5	---	---
3	12.0	7.0	18.5	5.5	22.0	16.5	---	---	25.0	19.5	---	---
4	13.5	8.0	9.0	8.5	22.0	13.5	---	---	25.0	19.0	---	---
5	15.5	8.5	10.0	9.0	22.0	14.5	---	---	20.0	19.0	---	---
6	13.0	8.0	11.0	8.0	21.0	15.0	24.5	19.0	22.5	19.0	24.5	17.5
7	17.5	8.0	13.5	8.0	20.0	16.5	24.0	17.5	23.5	19.5	25.0	16.5
8	14.0	8.0	11.5	10.0	22.5	18.0	22.5	19.0	25.0	18.0	26.0	18.0
9	14.5	6.5	16.0	10.0	22.5	16.5	24.5	18.0	25.0	18.5	27.0	18.0
10	19.0	7.5	14.0	9.5	24.0	13.5	23.0	19.0	21.5	19.5	26.0	19.0
11	13.5	8.0	19.0	7.5	23.5	14.5	22.5	16.5	20.5	18.5	25.5	19.0
12	18.0	6.5	13.5	11.5	24.5	15.0	23.0	15.0	23.5	18.5	25.0	18.5
13	18.0	7.5	13.0	11.0	17.0	11.5	19.5	16.5	23.5	19.0	24.5	20.5
14	16.5	5.5	10.5	9.5	20.5	12.5	25.5	17.5	24.5	18.5	22.0	20.0
15	17.0	6.5	11.5	9.5	19.5	14.5	24.0	18.0	25.5	19.0	24.5	19.0
16	14.5	5.0	12.0	9.5	22.0	15.5	25.0	19.0	24.0	19.5	19.5	18.5
17	17.5	5.0	14.5	10.0	23.5	17.0	24.5	16.5	26.0	19.0	22.0	18.0
18	12.0	6.0	19.0	9.5	26.0	18.0	24.5	16.0	27.5	19.5	24.0	18.5
19	12.5	8.0	22.0	11.0	23.0	17.0	26.0	16.5	27.5	19.0	24.5	19.0
20	8.5	7.0	23.0	12.0	24.0	17.0	26.5	18.5	26.0	18.5	25.5	19.5
21	8.0	6.0	19.5	13.0	24.0	16.0	28.0	20.0	25.5	16.5	25.5	19.5
22	15.5	4.5	19.5	10.5	23.0	15.0	29.5	20.5	26.5	16.0	21.5	16.5
23	9.0	6.0	16.5	13.5	23.0	15.0	29.0	20.5	26.0	16.5	21.0	14.0
24	15.0	6.5	16.5	14.5	---	---	23.0	21.0	27.0	17.5	19.5	16.0
25	10.0	8.0	22.0	13.0	---	---	22.5	20.0	27.5	19.0	20.0	14.5
26	12.0	7.5	23.5	13.0	---	---	25.5	19.5	23.5	19.0	19.5	12.0
27	17.5	6.0	24.0	13.5	---	---	24.0	20.0	21.5	19.5	19.5	12.5
28	16.0	5.5	24.5	14.5	---	---	26.5	19.0	---	---	18.5	13.5
29	17.0	6.0	20.5	15.5	---	---	25.0	18.0	---	---	18.5	10.5
30	18.5	8.0	22.5	16.0	---	---	20.5	19.0	---	---	18.5	12.0
31	---	---	25.0	16.0	---	---	22.0	18.5	---	---	---	---
MONTH	19.0	4.5	25.0	5.5	26.0	11.5	29.5	15.0	28.0	16.0	27.0	10.5
YEAR	29.5	.0										

03201800 SANDY RUN NEAR LAKE HOPE, OH

LOCATION.--Lat 39°20'01", long 82°19'56", in T.11 N., R.16 W., Vinton County, Hydrologic Unit 05090101, on right bank at upstream side on bridge of King Hollow Trail, 1,200 ft (366 m) downstream from Harbarger Hollow, 2.6 mi (4.2 km) upstream from spillway of Lake Hope, and 5.0 mi (8.0 km) northeast of Zaleski.

DRAINAGE AREA.--4.99 mi² (12.9 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1957 to September 1978 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 715.51 ft (218.087 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good above 5 ft³/s, fair below.

AVERAGE DISCHARGE.--21 years, 5.73 ft³/s (0.162 m³/s), 15.59 in/yr (396 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,770 ft³/s (107 m³/s) Aug. 3, 1958, gage height, 8.41 ft (2.563 m) from rating curve extended above 600 ft³/s (17.0 m³/s) on the basis of slope-area measurements at gage heights 7.68 ft (2.341 m), 8.02 ft (2.444 m), and 8.52 ft (2.597 m); no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 200 ft³/s (5.66 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 26	---	unknown		ice jam		May 8	1845	264	7.48	4.30	1.311
Mar. 14	0830	215	6.08	4.09	1.246	July 2	2100	*269	7.62	*4.44	1.353

Minimum discharge, 0.15 ft³/s (0.004 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	.65	11	1.2	1.6	.73	8.9	7.5	1.2	.59	3.0	3.4
2	1.1	.67	4.4	1.3	1.4	.72	6.9	6.7	1.0	21	1.9	2.1
3	.53	.69	2.8	1.2	1.3	.71	5.8	6.1	1.2	13	1.5	2.0
4	.37	.69	1.9	1.1	1.3	.71	5.9	17	.96	3.6	1.5	1.6
5	.31	.67	38	1.2	1.2	.71	5.8	22	.86	2.1	2.1	1.2
6	.70	.74	9.9	1.3	1.1	.71	7.3	12	.74	1.7	3.7	.96
7	.49	.93	4.0	2.2	1.1	.71	12	9.8	1.1	1.5	2.7	.83
8	1.2	.80	2.7	3.0	1.0	.71	9.0	50	1.4	1.4	2.1	.96
9	1.8	.71	8.2	18	1.0	.70	7.6	33	2.4	1.4	1.4	.93
10	1.1	1.4	4.3	10	.98	11	7.0	14	1.1	1.2	4.7	.85
11	.74	1.4	2.4	6.0	.97	13	6.8	9.1	.88	1.1	4.1	.77
12	.65	1.1	2.2	4.5	.96	58	6.7	14	1.0	.93	3.3	.71
13	.55	.88	4.9	3.0	.92	58	6.2	30	1.2	.84	3.6	.71
14	.49	.84	21	2.6	.90	131	5.5	23	.80	4.7	3.2	1.5
15	.53	.86	9.5	2.4	.89	34	4.9	19	.72	4.9	2.4	4.9
16	.84	.90	5.5	2.3	.85	20	4.5	15	.67	3.9	2.4	5.3
17	.65	1.9	3.7	2.3	.84	15	4.2	12	.64	3.3	2.2	4.7
18	.67	1.6	3.0	2.1	.83	13	12	5.7	.61	2.7	1.3	3.2
19	.88	1.3	2.3	2.0	.81	11	19	5.6	1.1	2.2	1.0	2.7
20	.79	1.2	3.9	1.9	.80	6.9	17	5.4	.67	1.9	1.0	2.3
21	.69	1.4	3.3	1.9	.79	11	13	5.2	.68	1.7	.94	2.1
22	.68	1.4	2.4	1.8	.78	8.8	11	4.9	.61	1.5	.72	2.0
23	.69	1.3	2.1	5.0	.76	7.7	9.4	4.6	.54	1.3	.63	1.8
24	.65	1.2	2.0	30	.75	6.6	9.4	4.5	.49	2.2	.83	1.6
25	.65	1.1	2.1	52	.75	18	14	4.5	.46	3.4	.97	1.8
26	.86	1.2	1.5	68	.74	46	17	4.2	1.7	2.7	1.0	1.4
27	.84	.98	1.3	10	.74	34	14	3.9	.73	2.1	1.1	1.2
28	.73	1.1	1.1	6.0	.73	18	11	3.7	.59	1.7	1.2	1.2
29	.69	1.1	1.2	3.0	---	14	9.7	3.4	.51	1.2	.90	1.7
30	.65	4.5	1.1	1.9	---	12	8.5	2.8	.46	2.2	3.3	1.9
31	.62	---	1.1	1.7	---	10	---	1.6	---	4.7	6.8	---
TOTAL	23.84	35.21	164.8	250.9	26.79	563.41	280.0	360.2	27.04	98.66	67.49	58.32
MEAN	.77	1.17	5.32	8.09	.96	18.2	9.33	11.6	.90	3.18	2.18	1.94
MAX	1.8	4.5	38	68	1.6	131	19	50	2.4	21	6.8	5.3
MIN	.31	.65	1.1	1.1	.73	.70	4.2	1.6	.46	.59	.63	.71
CFSM	.15	.23	1.07	1.62	.19	3.65	1.87	2.33	.18	.64	.44	.39
IN.	.18	.26	1.23	1.87	.20	4.20	2.09	2.68	.20	.74	.50	.43

CAL YR 1977 TOTAL 1371.94 MEAN 3.76 MAX 87 MIN .05 CFSM .75 IN 10.23
WTR YR 1978 TOTAL 1956.66 MEAN 5.36 MAX 131 MIN .31 CFSM 1.07 IN 14.58

03201800 SANDY RUN NEAR LAKE HOPE, OH

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959 to 1961, 1970 to 1978 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1970 to September, 1978 (discontinued).
pH: December 1970 to September, 1978 (discontinued).
WATER TEMPERATURES: December 1970 to September, 1978 (discontinued).
DISSOLVED OXYGEN: December 1970 to June, 1978 (discontinued).

INSTRUMENTATION.--Water-quality monitor since December 1970.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,440 micromhos July 11, 12, 1973; minimum, 53 micromhos Sept. 3, 1974.
pH: Maximum, 5.8 units Mar. 12, July 14, 1978; minimum, 2.1 units Mar. 25, 1971, Aug. 31, 1972.
WATER TEMPERATURES: Maximum, 28.5°C Aug. 26, 1975; minimum, 0.0°C on many days during winter periods.
DISSOLVED OXYGEN: Maximum, 15.0 mg/L or higher on many days during January, November, and December 1971, January and February 1973; minimum, 2.0 mg/L Aug. 29, 30, 1973.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 792 micromhos Aug. 31; minimum, 96 micromhos May 8.
pH: Maximum, 5.8 units Mar. 12, July 14; minimum, 3.4 units Feb. 5, 6.
WATER TEMPERATURES: Maximum, 27.0°C July 23; minimum, 0.0°C on many days during winter period.
DISSOLVED OXYGEN: Maximum, 14.6 mg/L Apr. 15; minimum, 5.4 mg/L Oct. 1.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	789	582	696	693	492	411	531	474	---	---	450	420
2	780	732	699	687	498	489	537	486	333	324	441	414
3	753	747	699	690	510	495	486	462	324	300	501	414
4	750	720	702	696	516	510	486	468	324	297	510	456
5	738	726	705	696	516	201	492	474	381	330	453	423
6	729	696	702	684	345	285	531	492	378	342	435	414
7	729	714	711	696	393	348	522	345	342	330	435	390
8	726	690	726	711	408	396	339	159	339	327	432	387
9	768	723	729	723	399	300	246	186	366	339	450	390
10	756	705	735	693	384	333	300	249	384	369	390	189
11	705	696	774	708	405	384	312	285	384	363	240	183
12	699	693	777	765	462	405	369	309	378	363	264	144
13	699	690	765	750	495	339	396	366	417	372	---	---
14	690	684	750	741	321	243	387	369	459	432	---	---
15	687	669	738	732	303	270	366	339	432	390	---	---
16	681	666	732	702	357	303	339	324	390	372	249	192
17	681	672	720	690	390	363	363	321	372	360	210	183
18	681	669	753	723	456	393	402	363	378	360	231	204
19	684	672	720	693	441	420	363	330	399	378	264	207
20	687	681	693	672	447	399	414	324	399	393	240	204
21	693	687	678	666	399	384	411	348	402	396	267	240
22	690	684	678	669	423	402	345	327	405	390	246	240
23	687	684	690	678	429	414	330	318	402	390	270	240
24	687	681	693	681	477	432	366	321	456	402	267	264
25	687	675	684	675	546	465	291	138	453	423	288	168
26	693	678	687	675	519	498	---	---	423	411	165	120
27	699	690	708	681	501	492	---	---	411	399	180	120
28	702	693	687	678	501	489	---	---	417	402	213	180
29	702	696	681	654	501	477	---	---	---	---	222	180
30	699	690	672	483	522	501	---	---	---	---	243	219
31	696	687	---	---	504	483	---	---	---	---	291	240
MONTH	789	582	777	483	546	201	537	138	459	297	510	120

03201800 SANDY RUN NEAR LAKE HOPE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1	300	282	318	300	348	342	438	390	540	522	729	663
2	288	261	306	297	360	345	495	135	537	522	663	648
3	261	252	318	300	387	360	306	192	522	513	648	642
4	---	---	336	141	396	378	348	312	516	507	642	633
5	294	267	258	153	381	381	357	345	519	483	636	615
6	297	258	210	189	387	384	429	348	543	525	615	594
7	279	207	252	210	420	375	393	363	564	543	603	585
8	243	210	291	96	459	396	453	381	561	552	603	576
9	270	246	---	---	438	345	534	438	549	531	591	555
10	315	276	---	---	369	354	447	441	582	510	573	543
11	318	294	---	---	378	369	447	438	627	582	573	531
12	291	267	---	---	474	372	441	435	627	606	561	519
13	291	267	---	---	477	402	441	435	612	591	552	504
14	291	282	---	---	423	411	441	189	612	600	546	480
15	309	279	---	---	411	399	429	405	612	606	630	501
16	333	309	---	---	408	396	444	429	606	564	---	---
17	348	321	---	---	414	408	438	429	597	585	---	---
18	345	192	228	225	417	381	429	423	582	558	---	---
19	216	174	246	228	495	390	426	417	564	528	---	---
20	201	174	276	243	495	456	420	417	549	525	---	---
21	213	201	309	276	456	438	417	411	549	531	---	---
22	216	210	276	267	450	432	411	402	540	516	---	---
23	270	219	300	255	438	429	405	375	516	474	---	---
24	270	255	270	243	435	429	429	390	519	480	---	---
25	270	186	249	240	435	429	450	435	504	468	---	---
26	219	192	273	252	585	369	459	450	495	465	---	---
27	237	222	300	273	456	441	474	447	495	462	---	---
28	255	240	318	300	456	444	471	453	489	432	---	---
29	366	258	324	303	447	438	453	435	501	429	---	---
30	366	315	360	306	444	432	486	423	567	504	---	---
31	---	---	342	309	---	---	519	459	792	582	---	---
MONTH	366	174	360	96	585	342	534	135	792	429	729	480
YEAR	792	96										

03201800 SANDY RUN NEAR LAKE HOPE, OH--Continued

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	4.3	4.0	4.1	4.0	4.1	3.8	3.9	3.7	---	---	3.9	3.8
2	4.0	3.9	4.2	4.0	4.0	3.9	3.8	3.6	3.9	3.6	4.0	3.9
3	4.0	3.9	4.1	4.0	4.1	4.0	4.0	3.8	4.2	3.9	4.0	3.7
4	4.0	3.9	4.1	4.1	4.0	4.0	4.1	4.0	4.3	3.8	3.8	3.7
5	4.1	4.0	4.1	4.0	5.3	4.0	4.1	3.9	3.8	3.4	4.0	3.8
6	4.1	4.0	4.1	4.1	5.3	5.1	3.9	3.7	3.8	3.4	4.0	3.9
7	4.1	4.0	4.2	4.1	5.3	5.1	4.2	3.7	3.8	3.6	4.0	3.9
8	4.1	4.0	4.1	4.0	5.1	4.4	5.5	4.3	---	---	3.9	3.8
9	4.0	3.9	4.1	4.0	5.0	3.7	5.5	5.0	---	---	4.0	3.7
10	3.9	3.8	4.2	4.0	4.9	4.6	5.0	4.5	---	---	5.3	4.0
11	4.0	3.9	4.1	4.0	4.8	4.5	4.7	4.4	---	---	5.6	4.7
12	4.0	4.0	4.1	4.0	4.6	3.8	4.5	3.9	---	---	5.8	5.7
13	4.0	4.0	4.1	4.1	4.5	3.7	3.9	3.7	---	---	---	---
14	4.1	4.0	4.1	4.1	5.2	4.6	3.8	3.8	---	---	---	---
15	4.1	4.0	4.2	4.0	5.0	4.9	4.0	3.8	3.9	3.7	---	---
16	4.1	4.1	4.1	4.0	5.0	4.8	4.1	3.9	4.0	3.9	---	---
17	4.2	4.1	4.1	4.0	4.8	4.4	4.1	3.9	4.1	4.0	4.9	4.6
18	4.2	4.0	4.0	3.9	4.4	4.0	3.8	3.7	4.1	4.0	4.7	4.5
19	4.2	4.1	4.0	3.9	4.2	4.0	4.0	3.8	4.0	3.9	4.6	4.2
20	4.2	4.0	4.0	3.9	4.2	4.0	4.0	3.6	4.0	3.9	4.7	4.4
21	4.2	4.0	4.0	3.9	4.4	4.2	3.8	3.6	4.0	3.9	4.5	4.0
22	4.2	4.0	4.0	3.9	4.2	4.1	3.9	3.8	4.0	4.0	4.6	4.5
23	4.1	4.0	4.0	3.9	4.2	4.1	4.0	3.9	4.0	4.0	4.5	4.2
24	4.1	4.0	3.9	3.9	4.1	3.9	4.0	3.8	4.0	3.8	4.4	4.3
25	4.1	4.0	4.0	3.9	3.9	3.6	5.1	3.9	3.9	3.8	5.3	4.2
26	4.1	4.1	4.0	4.0	4.0	3.8	---	---	4.0	3.9	5.5	5.3
27	4.1	4.0	4.0	4.0	4.1	4.0	---	---	4.0	3.9	5.5	5.1
28	4.1	4.0	4.0	3.9	4.3	4.2	---	---	4.1	3.9	5.1	4.6
29	4.2	4.0	4.0	3.9	4.3	4.1	---	---	---	---	4.6	4.5
30	4.2	4.0	4.1	3.8	4.1	3.9	---	---	---	---	4.7	4.4
31	4.2	4.0	---	---	3.9	3.8	---	---	---	---	4.4	4.0
MONTH	4.3	3.8	4.2	3.8	5.3	3.6	5.5	3.6	4.3	3.4	5.8	3.7

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4.2	4.0	4.2	4.0	4.4	4.4	4.4	4.3	4.4	4.4	4.1	3.9
2	4.3	4.0	4.2	4.2	4.4	4.3	5.0	4.2	4.4	4.3	4.1	4.1
3	4.8	4.3	4.2	4.1	4.4	4.3	5.4	4.8	4.4	4.3	4.2	4.1
4	4.5	4.0	5.5	4.0	4.4	4.3	4.9	4.7	4.4	4.3	4.2	4.1
5	4.3	4.2	5.5	5.4	4.4	4.4	4.7	4.6	4.4	4.3	4.2	4.1
6	4.4	4.2	5.4	5.2	4.4	4.4	4.9	4.5	4.4	4.3	4.2	4.1
7	4.9	4.2	5.2	4.7	4.4	4.3	4.5	4.5	4.3	4.3	4.2	4.1
8	5.0	4.6	5.6	5.4	4.2	4.1	4.5	4.2	4.4	4.3	4.1	4.1
9	4.5	4.3	---	---	4.5	4.1	4.2	4.1	4.3	4.3	4.1	4.1
10	4.3	4.0	---	---	4.5	4.4	4.3	4.2	4.4	4.3	4.1	4.1
11	4.1	4.0	---	---	4.5	4.4	4.4	4.3	4.3	4.2	4.1	4.1
12	4.4	4.2	---	---	4.4	4.3	4.5	4.4	4.2	4.2	4.2	4.1
13	4.4	4.2	---	---	4.3	4.1	4.5	4.4	4.2	4.2	4.2	4.1
14	4.4	4.2	---	---	4.4	4.3	5.8	4.4	4.2	4.1	4.3	4.1
15	4.4	4.2	---	---	4.4	4.4	4.6	4.5	4.2	4.2	4.5	4.2
16	4.2	4.1	---	---	4.4	4.3	4.5	4.4	4.2	4.2	---	---
17	4.2	4.0	---	---	4.4	4.3	4.6	4.5	4.2	4.2	---	---
18	4.9	4.1	4.7	4.6	4.4	4.3	4.6	4.5	4.2	4.2	---	---
19	5.4	4.9	4.6	4.4	4.4	4.1	4.6	4.5	4.2	4.2	---	---
20	5.4	5.2	4.4	4.2	4.2	4.2	4.5	4.5	4.3	4.2	---	---
21	5.3	5.2	4.2	4.1	4.3	4.2	4.5	4.4	4.3	4.1	---	---
22	5.3	5.0	4.4	4.2	4.4	4.3	4.5	4.4	4.2	4.2	---	---
23	5.0	4.4	4.4	4.2	4.5	4.4	4.4	4.4	4.3	4.2	---	---
24	4.5	4.4	4.5	4.4	4.5	4.4	4.5	4.4	4.2	4.2	---	---
25	5.3	4.3	4.6	4.4	4.5	4.4	4.4	4.4	4.2	4.1	---	---
26	5.3	5.0	4.5	4.3	4.5	3.9	4.4	4.4	4.2	4.1	---	---
27	5.0	4.7	4.4	4.2	4.2	4.1	4.4	4.4	4.2	4.1	---	---
28	4.7	4.5	4.2	4.1	4.2	4.2	4.4	4.4	4.2	4.1	---	---
29	4.4	3.9	4.2	4.1	4.3	4.2	4.7	4.4	4.3	4.1	---	---
30	4.0	3.9	4.5	4.2	4.3	4.3	4.5	4.4	4.3	4.2	---	---
31	---	---	4.5	4.4	---	---	4.5	4.4	4.2	3.9	---	---
MONTH	5.4	3.9	5.6	4.0	4.5	3.9	5.8	4.1	4.4	3.9	4.5	3.9
YEAR	5.8	3.4										

RACCOON CREEK BASIN

03201800 SANDY RUN NEAR LAKE HOPE, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	18.5	15.5	14.0	9.0	8.0	5.5	.5	.5	---	---	.5	.0
2	18.0	13.5	15.0	7.5	6.0	4.0	.5	.5	.5	.0	.5	.0
3	14.0	10.5	16.5	10.5	5.0	3.5	1.0	.5	.0	.0	.0	.0
4	13.5	8.5	17.5	14.0	5.5	4.0	1.0	.5	.5	.0	.5	.0
5	13.5	8.5	19.0	13.5	7.5	4.0	.5	.5	1.0	.5	.5	.0
6	15.5	11.5	16.5	15.0	5.0	.0	1.0	.5	1.0	.0	1.0	.0
7	12.5	8.0	16.5	14.0	.5	.0	1.0	.5	1.0	.0	.5	.0
8	13.0	11.5	17.0	15.0	2.0	.0	4.5	1.0	---	---	.5	.0
9	13.0	10.5	18.5	13.0	2.0	2.0	1.5	1.0	---	---	1.0	.0
10	13.0	10.0	16.5	9.5	2.0	2.0	1.0	1.0	---	---	1.0	.5
11	11.5	8.0	10.0	6.5	2.0	2.0	1.0	.0	---	---	1.0	.5
12	9.0	7.0	7.0	3.5	2.0	1.5	.5	.0	---	---	---	---
13	10.0	7.5	5.5	1.0	2.5	2.0	.5	.0	---	---	---	---
14	11.5	7.0	4.5	1.5	6.5	2.0	.5	.0	.0	.0	---	---
15	12.0	5.5	9.0	3.0	6.0	4.5	.5	.5	.0	.0	---	---
16	10.0	6.5	9.0	7.0	5.0	3.0	.5	.0	.0	.0	---	---
17	9.5	4.0	10.5	7.5	5.5	2.0	.0	.0	.0	.0	5.5	3.0
18	10.5	5.5	7.5	4.5	6.5	4.5	.0	.0	.0	.0	6.5	2.5
19	10.0	6.0	7.0	3.0	6.0	4.5	.0	.0	.0	.0	8.5	4.0
20	11.0	5.5	8.0	4.5	5.5	4.0	.0	.0	.0	.0	10.0	3.5
21	12.0	5.5	9.0	8.0	4.0	1.5	.0	.0	.0	.0	7.5	5.0
22	12.5	6.5	7.5	6.5	1.5	.5	.5	.0	.5	.0	11.5	3.5
23	13.0	9.0	10.0	6.5	3.0	.5	.5	.0	.5	.0	9.5	5.5
24	14.0	8.5	10.0	6.0	5.0	1.0	.5	.0	.0	.0	7.5	5.5
25	12.5	10.0	6.5	4.5	4.5	.0	.0	.0	.5	.0	6.5	4.0
26	15.0	11.5	4.5	.5	.0	.0	---	---	.5	.0	6.5	5.5
27	17.0	12.0	.5	.0	.0	.0	---	---	1.0	.0	6.0	5.0
28	15.0	11.0	3.5	.5	.0	.0	---	---	.5	.0	12.5	4.5
29	14.0	7.5	2.0	.0	.0	.0	---	---	---	---	12.5	5.0
30	13.0	6.5	5.0	2.0	.5	.0	---	---	---	---	11.5	3.0
31	11.5	6.5	---	---	1.0	.5	---	---	---	---	16.0	6.5
MONTH	18.5	4.0	19.0	.0	8.0	.0	4.5	.0	1.0	.0	16.0	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	17.0	8.5	16.0	7.5	21.5	16.5	23.0	19.5	23.0	19.0	21.5	18.0
2	12.5	8.5	16.0	7.0	20.0	17.5	21.5	19.0	24.5	19.5	21.0	16.5
3	11.5	7.5	16.0	7.0	20.0	17.5	19.5	19.0	24.0	20.5	22.0	17.5
4	---	---	13.0	10.0	18.5	14.5	19.5	18.5	23.0	20.0	22.0	18.5
5	15.0	10.0	11.0	10.0	19.5	15.5	20.0	18.0	21.0	19.5	22.0	16.0
6	13.5	9.5	11.5	9.0	19.0	15.5	21.5	17.5	22.5	20.5	23.5	17.5
7	18.5	10.0	13.0	9.0	19.0	17.0	22.5	19.0	23.0	21.0	24.0	18.0
8	14.5	9.0	14.0	11.5	21.0	18.5	23.0	20.5	23.5	19.0	25.5	19.5
9	15.0	8.0	---	---	20.0	17.5	23.5	20.0	24.0	19.5	26.5	20.0
10	19.5	9.0	---	---	20.0	14.5	23.0	21.5	22.0	21.0	26.5	21.0
11	16.0	11.5	---	---	20.5	15.5	21.0	18.5	21.5	20.5	25.5	21.0
12	17.5	8.0	---	---	22.0	17.5	21.5	16.5	23.0	20.0	25.5	20.0
13	17.0	9.5	---	---	18.5	14.5	19.5	17.0	23.5	21.0	24.5	22.0
14	15.0	7.5	---	---	17.0	12.5	22.5	19.0	24.0	20.5	23.0	21.0
15	16.0	8.0	---	---	17.5	13.5	22.0	19.0	24.5	20.5	23.5	20.5
16	13.0	6.5	---	---	19.5	15.5	23.0	20.0	24.5	21.5	---	---
17	16.0	6.5	---	---	22.0	17.5	22.0	17.5	25.5	21.5	---	---
18	13.0	9.5	19.5	17.0	23.5	18.5	22.0	16.5	25.5	20.5	---	---
19	13.0	9.5	20.0	12.0	22.5	20.0	23.0	17.5	26.0	20.5	---	---
20	9.5	8.0	20.0	13.0	22.0	18.0	23.5	19.5	---	---	---	---
21	8.5	7.5	17.5	14.5	22.5	19.5	25.0	20.5	---	---	---	---
22	16.0	6.0	17.0	12.0	21.0	17.5	26.0	21.5	---	---	---	---
23	9.5	7.5	16.0	14.0	20.5	15.0	27.0	21.5	---	---	---	---
24	15.0	7.5	16.0	14.5	21.5	16.5	23.0	22.0	25.0	19.0	---	---
25	12.0	9.5	19.5	14.0	21.5	16.5	22.5	21.5	26.5	20.5	---	---
26	13.0	9.0	20.5	14.0	23.0	19.5	24.5	21.0	23.0	21.0	---	---
27	18.0	7.0	21.0	15.0	25.0	21.0	24.0	21.0	26.5	21.0	---	---
28	18.0	7.0	21.0	16.0	25.0	21.0	24.0	20.0	26.5	21.0	---	---
29	17.0	7.5	19.0	16.5	25.0	20.0	23.5	19.0	25.0	21.5	---	---
30	19.0	11.5	20.0	16.5	24.0	19.5	21.5	20.5	22.5	21.0	---	---
31	---	---	21.5	16.5	---	---	22.0	20.0	21.0	20.0	---	---
MONTH	19.5	6.0	21.5	7.0	25.0	12.5	27.0	16.5	26.5	19.0	26.5	16.0
YEAR	27.0	.0										

03201800 SANDY RUN NEAR LAKE HOPE, OH--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.0	5.4	7.7	7.0	11.5	10.7	12.3	11.9	---	---	13.8	13.5
2	7.8	6.5	8.8	7.0	11.6	11.2	12.3	12.0	---	---	13.7	13.4
3	8.5	7.8	8.2	7.0	11.6	11.4	12.1	11.7	---	---	13.4	13.1
4	9.4	8.3	7.4	6.7	11.6	11.4	11.9	11.0	---	---	13.7	13.4
5	9.3	8.2	7.5	6.4	11.4	10.1	11.9	11.6	---	---	13.7	13.1
6	8.4	7.7	7.4	6.4	12.4	10.4	12.2	11.9	---	---	13.5	13.2
7	9.2	8.1	7.9	6.7	12.6	12.3	12.6	12.2	---	---	13.6	13.4
8	8.5	7.9	7.7	6.9	12.6	11.7	12.6	11.6	---	---	13.6	13.5
9	8.7	7.9	7.8	6.7	12.5	11.9	12.4	12.1	---	---	---	---
10	9.0	8.4	8.5	6.6	12.4	12.1	12.3	12.0	---	---	---	---
11	9.3	8.4	9.2	8.5	12.2	11.8	12.3	11.9	---	---	---	---
12	9.5	8.8	9.9	9.3	12.0	11.6	12.4	11.6	---	---	---	---
13	9.8	8.9	10.7	9.9	12.2	11.7	11.9	11.8	---	---	---	---
14	9.5	8.7	10.5	9.8	12.3	11.0	11.9	11.8	---	---	---	---
15	9.6	8.0	10.1	9.1	11.1	10.7	12.1	11.9	---	---	---	---
16	9.0	7.9	9.2	8.5	12.6	10.9	12.1	11.9	---	---	---	---
17	9.6	8.3	10.2	8.6	12.5	11.7	12.0	11.8	14.0	13.8	---	---
18	8.8	7.6	10.8	10.2	11.7	11.4	12.0	11.8	14.0	13.7	---	---
19	8.4	7.5	11.4	10.5	11.8	11.5	12.0	11.9	13.9	13.5	---	---
20	9.0	8.0	11.0	10.0	11.9	11.6	11.9	11.7	13.7	13.4	---	---
21	9.3	8.2	10.1	9.8	12.3	11.9	11.9	11.8	13.7	13.5	12.7	12.0
22	9.1	7.8	10.8	10.1	12.6	12.3	12.0	11.8	13.8	13.0	13.6	11.5
23	8.6	7.8	10.5	9.6	12.6	12.1	12.0	11.7	13.4	12.9	13.1	11.9
24	8.5	7.4	10.3	9.6	12.4	11.6	12.2	11.8	13.5	13.3	13.1	12.4
25	8.2	6.7	10.7	10.0	12.5	11.6	12.5	12.0	13.7	13.4	13.2	12.8
26	7.5	6.7	11.5	10.5	12.5	11.8	---	---	13.8	13.7	13.2	12.8
27	7.6	6.5	11.7	11.1	12.2	11.8	---	---	13.8	13.4	13.2	12.8
28	7.3	6.6	11.6	11.2	12.2	11.2	---	---	13.6	13.3	13.2	11.4
29	8.1	6.9	12.7	11.3	11.8	11.3	---	---	---	---	13.0	11.6
30	8.3	7.3	12.3	11.6	11.9	11.4	---	---	---	---	13.5	12.0
31	8.4	7.3	---	---	12.1	11.6	---	---	---	---	12.8	10.1
MONTH	9.8	5.4	12.7	6.4	12.6	10.1	12.6	11.0	14.0	12.9	13.8	10.1

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	12.8	9.5	10.5	9.1	8.4	7.8						
2	13.3	10.8	10.6	9.1	8.1	7.8						
3	13.3	12.2	10.5	8.9	8.1	7.7						
4	---	---	10.0	9.4	8.6	8.1						
5	11.0	10.1	10.9	9.8	8.3	7.6						
6	11.3	10.4	10.8	10.3	8.7	7.9						
7	11.4	9.5	10.7	9.9	8.4	7.8						
8	14.0	10.7	10.2	8.9	8.5	7.7						
9	14.2	10.6	---	---	8.5	8.0						
10	14.2	8.0	---	---	8.7	8.0						
11	10.5	9.1	---	---	8.5	7.8						
12	11.4	9.2	---	---	8.2	7.7						
13	11.5	9.9	---	---	8.7	7.8						
14	14.5	10.4	---	---	9.0	8.4						
15	14.6	10.3	---	---	8.8	8.2						
16	14.5	10.9	---	---	8.5	7.7						
17	13.9	10.2	---	---	8.1	7.4						
18	14.5	10.2	9.2	8.7	7.9	7.1						
19	12.2	9.5	10.0	8.5	8.0	7.0						
20	13.7	10.7	9.8	8.7	8.0	7.3						
21	13.4	11.2	9.5	9.0	7.8	7.0						
22	14.1	9.7	10.1	9.2	7.9	7.0						
23	13.0	10.9	9.7	9.3	---	---						
24	12.8	9.7	9.7	9.5	---	---						
25	12.7	10.2	9.9	8.9	---	---						
26	12.2	9.7	9.7	8.7	---	---						
27	10.9	8.9	9.4	8.6	---	---						
28	10.7	8.8	9.2	8.5	---	---						
29	10.5	8.9	9.0	8.4	---	---						
30	9.8	8.6	8.9	8.0	---	---						
31	---	---	8.4	7.8	---	---						
MONTH	14.6	8.0	10.9	7.8	9.0	7.0						
YEAR	14.6	5.4										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

RACCOON CREEK BASIN

03202000 RACCOON CREEK AT ADAMSVILLE, OH

LOCATION.--Lat 38°52'25", long 82°21'22", in SE 1/4 sec. 26, T.6N., R.16W., Gallia County, Hydrologic Unit 05090101, on left bank at downstream side of U.S. Highway 35 bridge at Adamsville, 1.3 mi (2.1 km) upstream from Ryan Run, and 1.4 mi (2.3 km) downstream from Indian Creek.

DRAINAGE AREA.--585 mi² (1,515 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1915 to December 1935, October 1938 to current year. Monthly discharge only for December 1935, published in WSP 1305.

REVISED RECORDS.--WSP 873: 1916-18, 1920, 1922, 1924, 1926-27, 1931, 1933, 1935(M). WSP 1908: Drainage area. WSP 2108: 1968-70(M).

GAGE.--Water-stage recorder. Datum of gage is 570.08 ft (173.748 m) National Geodetic Vertical Datum of 1929. Prior to June 13, 1940, nonrecording gage, June 13, 1940 to Oct. 27, 1970 water-stage recorder 480 ft (146 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Sediment data collected at this site 1969 to 1974.

AVERAGE DISCHARGE.--60 years, 644 ft³/s (18.24 m³/s), 14.95 in/yr (380 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,000 ft³/s (566 m³/s) May 28, 1968, gage height 28.69 ft (8.745 m), from rating curve extended above 13,000 ft³/s (368 m³/s) on basis of slope-conveyance estimate of peak flow; minimum, 1.1 ft³/s (0.031 m³/s) Oct. 17-19, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in January 1937 reached a stage of 25.2 ft (7.68 m), from floodmark, discharge, 16,000 ft³/s (453 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s (85.0 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 26	1500	4100	116	15.73	4.795	Mar. 17	1200	*62.50	117	*18.51	5.642

Minimum discharge, 19 ft³/s (0.54 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	31	408	190	1400	220	967	503	394	108	126	438
2	51	33	607	180	1000	220	779	440	327	163	118	247
3	48	35	636	180	800	220	660	383	270	359	105	175
4	46	38	530	180	580	220	598	404	284	354	102	152
5	42	34	1310	180	430	220	698	969	247	630	89	121
6	56	37	2090	180	390	210	611	1230	213	418	82	98
7	60	45	2110	226	360	210	596	1130	190	230	88	82
8	60	80	1740	1010	340	220	613	1060	210	172	70	68
9	97	139	1340	2550	320	300	613	1820	600	155	62	58
10	122	110	1010	2460	310	728	569	2140	450	145	56	51
11	122	118	839	2250	300	1450	505	2140	300	145	88	45
12	102	98	674	1950	290	2180	460	1850	240	154	98	42
13	101	81	598	1640	280	2910	419	1790	200	135	208	65
14	86	76	598	1380	270	4100	381	2340	160	112	287	63
15	70	79	842	1050	270	5080	334	2510	160	110	578	54
16	63	70	1170	800	260	5850	298	2390	160	330	404	77
17	60	137	1130	620	250	6160	272	2470	150	578	219	97
18	52	217	796	440	250	5780	307	1840	150	287	150	91
19	51	194	594	360	240	4920	523	1490	150	154	121	73
20	47	178	518	320	240	3080	882	1140	147	118	110	70
21	46	156	440	290	230	1370	1130	887	147	96	98	88
22	41	145	370	270	230	1270	1100	696	141	81	91	137
23	39	126	330	260	230	1140	894	602	134	69	69	88
24	36	121	280	600	230	982	744	779	126	69	55	70
25	35	112	250	1330	230	972	667	1010	111	89	51	57
26	35	108	230	3720	220	1510	788	869	122	98	48	46
27	34	103	220	4000	220	2550	892	643	125	79	45	42
28	33	105	210	4000	220	2740	832	492	112	72	40	37
29	39	119	200	3200	---	2740	692	404	107	77	33	33
30	33	186	190	2500	---	2250	578	466	108	94	46	30
31	30	---	190	1800	---	1440	---	408	---	189	337	---
TOTAL	1771	3113	22442	40118	10390	63242	19392	37296	6240	5870	4066	2795
MEAN	57.1	104	724	1294	371	2040	646	1203	208	189	131	93.2
MAX	122	217	2110	4000	1400	6160	1130	2510	600	630	578	438
MIN	30	31	190	180	220	210	272	383	107	69	33	30
CFSM	.10	.18	1.24	2.21	.63	3.49	1.10	2.06	.36	.32	.22	.16
IN.	.11	.20	1.43	2.55	.66	4.02	1.23	2.37	.40	.37	.26	.18

CAL YR 1977 TOTAL 148386 MEAN 407 MAX 3080 MIN 11 CFSM .70 IN 9.44
WTR YR 1978 TOTAL 216735 MEAN 594 MAX 6160 MIN 30 CFSM 1.02 IN 13.78

03202000 RACCOON CREEK AT ADAMSVILLE, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1951-54, 1964 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1967 to current year.
pH: May 1967 to current year.
WATER TEMPERATURES: October 1951 to September 1954, October 1964 to current year.
DISSOLVED OXYGEN: May 1967 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,930 micromhos Nov. 20, 1964; minimum, 95 micromhos Aug. 1, 1976.
pH: Maximum, 8.8 units Feb. 16, 1972; minimum, 2.0 units May 6, 1972.
WATER TEMPERATURES: Maximum, 29.0°C June 16, 1952; minimum, 0.0°C on many days during winter periods.
DISSOLVED OXYGEN: Maximum, 15.0 mg/L or higher on several days during 1968-69, 1971; minimum recorded, 2.5 mg/L May 6, 1972.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 789 micromhos Sept. 30; minimum, 171 micromhos Mar. 17.
pH: Maximum, 7.2 units May 8, Aug. 31; minimum, 3.5 units Aug. 3.
WATER TEMPERATURES: Maximum recorded, 26.5°C Aug. 19-22; minimum recorded, 0.0°C on several days during winter period.
DISSOLVED OXYGEN: Maximum recorded, 12.8 mg/L Dec. 12, Jan. 4, Mar. 9, 10; minimum recorded, 6.4 mg/L July 30, Aug. 25.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	653	486	662	653	461	389	425	419	266	255	407	402
2	558	468	662	647	554	389	452	420	287	255	414	404
3	585	563	663	646	569	510	452	434	306	290	420	411
4	599	572	654	650	566	498	456	446	315	305	420	410
5	632	588	669	654	492	218	456	446	326	315	426	416
6	635	494	666	648	330	239	449	431	333	324	431	416
7	581	497	642	624	309	258	429	414	342	335	429	414
8	594	582	644	611	299	270	416	207	348	342	414	405
9	590	515	632	564	291	284	272	215	351	347	404	381
10	551	533	558	516	333	288	279	264	357	351	377	257
11	543	525	513	446	339	327	297	249	365	357	279	257
12	555	537	515	462	374	338	272	257	374	366	272	243
13	552	518	525	482	369	362	287	273	374	369	248	218
14	570	519	549	527	366	360	303	287	374	368	215	182
15	666	573	567	549	387	360	324	303	381	372	183	180
16	731	669	570	564	393	375	333	326	386	381	185	176
17	779	735	573	495	389	350	342	333	386	384	185	171
18	779	747	512	482	347	338	347	342	393	384	198	186
19	747	677	506	482	339	333	356	347	396	387	218	198
20	675	629	567	510	347	341	357	353	399	390	245	218
21	630	621	582	569	353	345	354	351	399	395	275	246
22	630	624	579	548	384	354	365	353	408	399	288	275
23	630	612	572	549	387	375	371	356	414	408	296	284
24	636	620	566	554	395	386	368	342	414	410	293	285
25	645	632	572	558	395	387	342	218	413	408	288	266
26	642	635	578	566	405	389	212	185	413	405	263	230
27	650	641	578	563	417	405	215	197	411	407	254	227
28	659	648	590	578	432	417	230	216	411	405	245	221
29	668	654	576	504	425	405	231	225	---	---	221	210
30	669	659	497	468	432	425	245	228	---	---	236	221
31	672	656	---	---	431	422	258	245	---	---	245	236
MONTH	779	468	669	446	569	218	456	185	414	255	431	171

03202000 RACCOON CREEK AT ADAMSVILLE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C)+ WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	264	243	308	300	315	282	456	423	396	354	387	309
2	281	266	314	308	332	315	438	323	---	---	420	384
3	267	278	320	312	360	332	---	---	414	405	471	423
4	291	282	321	306	375	360	372	312	---	---	485	459
5	285	266	326	284	---	---	582	378	---	---	482	432
6	300	290	336	287	386	336	450	372	---	---	438	426
7	329	299	312	291	386	357	---	---	---	---	447	441
8	338	321	305	240	374	311	---	---	474	465	461	444
9	338	323	263	215	333	297	---	---	495	474	495	462
10	333	314	258	219	281	216	---	---	507	500	536	498
11	342	324	237	209	296	272	366	354	504	447	561	531
12	344	327	234	216	332	288	393	384	447	411	585	558
13	344	324	236	221	311	293	---	---	468	366	702	297
14	345	342	243	224	339	308	---	---	---	---	462	267
15	347	341	252	233	---	---	---	---	---	---	501	468
16	357	347	---	---	384	357	---	---	501	339	---	---
17	362	354	---	---	375	357	---	---	323	266	---	---
18	366	326	236	227	381	369	---	---	383	278	675	648
19	345	311	263	224	387	375	---	---	731	398	675	624
20	335	315	242	227	386	377	---	---	743	633	675	612
21	345	315	255	240	390	378	---	---	627	590	639	549
22	357	297	270	255	399	369	---	---	681	609	626	297
23	305	288	279	242	414	369	---	---	678	636	630	537
24	294	290	278	275	423	344	---	---	705	681	711	635
25	296	293	311	275	417	408	363	357	696	669	723	711
26	302	296	291	269	414	378	375	351	711	666	744	720
27	311	297	284	275	399	387	398	378	711	678	747	723
28	311	303	299	290	402	354	401	393	690	651	762	732
29	311	303	305	281	417	402	396	387	705	675	783	747
30	305	296	---	---	426	429	402	357	675	594	789	762
31	---	---	---	---	---	---	378	261	591	273	---	---
MONTH	366	243	336	209	426	216	582	261	743	266	789	267
YEAR	789	171										

03202000 RACCOON CREEK AT ADAMSVILLE, OH--Continued

PH (UNITS): WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	6.3	5.4	5.6	5.6	6.5	6.2	5.8	5.3	---	---	6.2	5.9
2	6.4	6.0	5.7	5.5	6.2	5.2	5.7	5.4	---	---	6.4	5.9
3	6.1	5.9	5.7	5.6	5.9	5.2	5.6	5.2	---	---	6.0	5.9
4	6.0	5.4	5.7	5.6	6.0	5.7	5.5	4.7	---	---	6.0	5.8
5	5.5	5.1	5.8	5.7	6.2	5.8	5.1	4.6	---	---	6.5	5.8
6	5.6	5.2	5.8	5.8	5.7	5.0	5.0	4.8	---	---	6.5	6.1
7	6.1	5.6	6.0	5.9	5.8	5.4	5.6	4.8	5.5	5.2	6.3	6.0
8	6.5	6.1	6.0	5.4	5.8	5.4	6.0	5.6	5.7	5.4	6.3	6.1
9	6.4	6.1	5.7	5.3	5.9	5.3	5.8	5.5	5.8	5.5	6.5	6.3
10	6.3	5.9	5.7	5.3	5.9	5.4	5.6	5.5	5.8	5.5	6.8	6.5
11	5.9	5.5	6.3	5.8	5.8	5.3	5.7	5.3	5.8	5.5	6.8	6.5
12	5.6	5.3	6.3	6.3	6.0	5.7	---	---	5.9	5.8	6.5	6.3
13	5.5	5.2	6.4	6.2	6.0	5.9	---	---	5.9	5.8	6.5	6.3
14	5.4	5.3	6.2	5.9	6.0	5.5	---	---	6.0	5.8	6.6	6.3
15	5.4	5.2	5.8	5.4	6.0	5.8	---	---	6.0	5.8	6.3	6.1
16	5.5	5.2	6.1	5.9	6.0	5.7	---	---	6.0	5.8	6.2	6.0
17	5.6	5.4	6.6	6.1	6.0	5.8	---	---	6.0	5.9	6.5	6.0
18	5.7	5.5	6.5	6.2	5.9	5.8	---	---	6.1	6.0	6.2	5.9
19	5.8	5.7	6.2	5.6	5.9	5.8	---	---	6.1	5.7	6.2	5.9
20	5.9	5.8	5.9	5.4	6.1	5.9	---	---	6.1	5.7	6.3	5.9
21	5.9	5.7	5.6	5.4	6.1	5.8	---	---	6.1	6.0	5.9	5.7
22	5.8	5.5	6.1	5.7	5.8	5.5	---	---	6.1	5.8	5.9	5.7
23	5.6	5.5	6.2	6.1	5.9	5.5	---	---	6.1	5.7	5.8	5.5
24	5.6	5.4	6.2	6.2	5.9	5.8	---	---	6.0	5.8	5.8	5.6
25	5.7	5.6	6.2	6.2	6.0	5.8	---	---	6.0	5.9	6.2	5.6
26	5.8	5.7	6.2	5.9	5.8	5.5	---	---	6.2	6.0	6.5	6.2
27	5.8	5.7	5.9	5.4	5.7	5.4	---	---	6.3	6.1	6.3	5.9
28	5.8	5.7	5.9	5.2	5.7	5.4	---	---	6.4	6.2	6.3	6.0
29	5.7	5.4	6.3	5.6	5.6	5.5	---	---	---	---	6.3	6.0
30	5.5	5.4	6.4	6.3	5.5	5.1	---	---	---	---	6.1	5.8
31	5.6	5.5	---	---	5.7	4.6	---	---	---	---	6.3	5.9
MONTH	6.5	5.1	6.6	5.2	6.5	4.6	6.0	4.6	6.4	5.2	6.8	5.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.0	5.9	6.4	6.1	6.5	6.3	6.5	6.1	4.3	4.0	7.1	5.1
2	5.9	5.7	6.4	6.1	6.5	6.1	6.7	6.0	---	---	5.3	4.8
3	6.1	5.7	6.4	6.1	6.8	6.0	---	---	3.7	3.5	5.2	4.8
4	6.2	5.9	6.7	6.2	6.5	6.2	6.7	6.2	---	---	5.6	5.0
5	6.5	6.1	6.7	5.4	6.4	6.1	---	---	---	---	5.3	5.0
6	6.3	6.1	6.4	5.4	6.5	6.3	6.2	5.8	---	---	5.9	5.3
7	6.3	6.1	6.5	6.3	6.5	6.3	---	---	---	---	6.2	5.9
8	6.1	5.8	7.2	6.3	6.8	6.5	---	---	3.9	3.7	6.4	6.1
9	6.2	5.8	7.1	5.8	---	---	---	---	4.0	3.8	6.4	6.1
10	6.5	6.1	6.6	6.0	---	---	---	---	4.0	3.8	6.4	6.1
11	6.3	6.0	6.7	6.2	---	---	6.5	6.4	4.5	4.0	6.4	6.2
12	6.2	6.0	---	---	---	---	6.6	6.3	4.7	4.2	6.4	6.2
13	6.1	5.9	---	---	---	---	6.5	6.4	4.6	3.9	6.7	6.4
14	6.1	5.8	---	---	---	---	6.3	5.5	4.4	4.1	6.8	6.7
15	6.2	6.0	---	---	---	---	5.9	5.7	---	---	6.8	6.6
16	6.1	6.0	---	---	6.3	6.1	---	---	6.2	5.9	6.8	6.6
17	6.3	6.0	---	---	6.4	6.1	---	---	6.4	6.2	6.6	4.9
18	6.7	6.1	6.2	5.9	6.4	6.2	---	---	6.6	6.3	5.1	4.7
19	6.7	6.4	6.2	5.8	6.4	6.2	---	---	6.5	6.2	5.3	4.9
20	6.3	5.6	6.3	6.0	6.3	6.1	---	---	6.6	6.3	6.0	5.2
21	6.1	5.8	6.3	6.2	6.3	6.2	---	---	6.8	6.5	6.6	6.0
22	6.1	5.7	6.2	6.0	6.5	6.1	---	---	6.9	6.1	7.0	6.7
23	6.2	5.9	6.3	6.0	6.4	6.3	---	---	6.3	6.0	6.9	6.7
24	6.4	6.1	6.7	6.3	6.5	6.2	---	---	6.3	5.9	6.8	6.7
25	6.4	6.2	6.3	5.4	6.5	6.3	6.9	4.5	6.2	5.7	6.7	6.5
26	6.3	6.1	6.5	5.9	6.6	6.2	5.1	4.2	6.6	6.2	6.6	6.3
27	6.5	5.7	6.6	6.2	6.6	6.4	4.4	4.1	6.4	6.0	6.6	6.4
28	6.5	6.2	6.5	6.2	6.6	6.4	4.2	4.0	6.6	6.3	6.6	6.4
29	6.5	6.1	6.6	6.3	6.6	6.4	4.1	3.9	6.4	6.3	6.6	6.4
30	6.5	6.3	6.6	6.1	6.6	6.2	4.5	4.1	6.8	6.3	6.6	6.4
31	---	---	6.6	6.3	---	---	4.6	4.2	7.2	6.7	---	---
MONTH	6.7	5.6	7.2	5.4	6.8	6.0	6.9	3.9	7.2	3.5	7.1	4.7
YEAR	7.2	3.5										

03202000 RACCOON CREEK AT ADAMSVILLE, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.5	18.5	13.0	12.0	7.0	5.5	.5	.5	---	---	1.0	.5
2	19.5	18.0	13.5	12.0	6.5	6.0	.5	.0	---	---	1.0	.5
3	18.0	16.5	14.5	13.5	6.0	5.0	.0	.0	---	---	1.0	.5
4	16.5	15.0	15.5	14.5	5.5	4.5	.5	.0	.5	.0	1.0	.5
5	15.5	14.5	16.5	15.5	6.5	5.0	.0	.0	.0	.0	1.0	.0
6	15.5	14.5	16.5	16.5	6.0	5.0	.0	.0	.5	.0	.5	.5
7	15.5	14.0	17.0	16.5	5.0	3.0	.5	.0	.5	.0	1.0	.5
8	15.0	14.5	17.0	16.5	3.0	2.0	4.5	.5	.5	.5	1.0	.5
9	14.5	14.0	17.0	16.5	2.0	1.5	4.0	1.0	.5	.5	.5	.5
10	14.0	13.5	17.0	14.5	1.5	.5	1.0	1.0	.5	.5	.5	.5
11	13.5	12.5	14.0	11.5	.5	.0	1.0	.5	1.0	.5	---	---
12	13.0	12.0	11.5	9.0	.5	.0	1.0	.5	.5	.5	---	---
13	12.0	11.5	9.0	7.0	.5	.5	1.5	1.0	.5	.5	---	---
14	12.0	11.5	7.0	5.5	2.0	.5	---	---	.5	.5	---	---
15	12.0	10.5	7.0	5.0	2.5	2.0	---	---	1.0	.5	---	---
16	12.0	11.0	8.0	7.0	2.5	2.0	---	---	1.0	.5	1.0	.5
17	11.0	9.5	9.0	8.5	3.5	2.5	---	---	1.0	.5	1.5	.0
18	10.5	9.5	9.0	7.5	4.5	3.5	---	---	1.0	.5	2.0	.5
19	10.5	10.0	7.5	7.0	5.0	4.5	---	---	1.0	.5	4.0	1.5
20	10.5	9.5	7.0	6.5	5.5	5.0	---	---	1.0	.5	---	---
21	10.5	9.5	8.0	7.0	5.0	4.0	---	---	1.0	.5	---	---
22	10.5	9.5	8.0	7.5	4.0	3.0	---	---	1.0	1.0	---	---
23	11.5	10.5	8.5	7.5	3.0	2.5	---	---	1.0	1.0	---	---
24	12.0	11.0	9.0	8.5	4.0	3.0	---	---	1.0	1.0	---	---
25	12.5	12.0	8.0	7.0	4.0	2.5	---	---	1.5	.5	---	---
26	13.5	12.5	7.0	4.0	2.5	1.0	---	---	1.0	.5	---	---
27	14.5	13.5	4.0	2.5	1.0	.5	---	---	1.0	.0	---	---
28	14.5	14.0	3.5	2.5	1.0	.0	---	---	.5	.5	---	---
29	14.0	12.5	3.5	2.5	.0	.0	---	---	---	---	---	---
30	13.0	11.5	5.0	3.0	.0	.0	---	---	---	---	---	---
31	12.5	11.5	---	---	.5	.0	---	---	---	---	---	---
MONTH	19.5	9.5	17.0	2.5	7.0	.0	4.5	.0	1.5	.0	4.0	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	14.0	13.5	---	---	26.0	25.0	23.0	22.0	21.5	21.0
2	---	---	14.5	13.5	23.5	22.5	25.0	23.5	24.5	24.0	21.5	20.5
3	---	---	14.5	13.5	23.5	22.5	---	---	24.0	23.5	22.0	21.0
4	---	---	14.5	13.5	22.5	20.0	23.0	22.5	---	---	22.5	21.5
5	---	---	13.5	12.5	---	---	23.5	23.0	---	---	22.0	21.0
6	---	---	12.5	12.0	21.5	20.5	23.0	22.5	---	---	22.5	21.0
7	---	---	12.5	12.0	21.5	20.5	---	---	---	---	23.0	21.5
8	15.0	14.0	13.0	12.0	22.0	20.0	---	---	24.0	23.0	23.5	22.0
9	14.5	14.0	14.0	13.0	21.0	19.5	---	---	24.0	23.0	24.0	22.5
10	15.5	14.5	15.0	14.0	20.5	19.0	---	---	24.5	23.5	24.5	23.0
11	15.5	15.0	15.5	14.5	21.5	19.5	24.5	24.0	24.0	23.0	24.5	23.5
12	15.5	14.0	---	---	22.0	21.5	24.0	22.5	24.0	22.5	24.5	23.5
13	15.5	14.5	---	---	22.0	19.5	23.5	22.5	23.5	22.0	24.5	24.0
14	15.0	14.0	---	---	20.0	19.0	24.0	22.5	22.0	21.5	24.5	23.5
15	15.5	14.0	---	---	---	---	24.0	23.0	---	---	24.0	23.0
16	14.5	13.5	---	---	---	---	---	---	24.5	24.0	24.0	23.0
17	14.5	13.0	---	---	22.0	19.5	---	---	25.5	24.0	23.0	22.5
18	14.5	13.5	14.0	13.5	23.5	21.5	---	---	25.5	25.0	23.5	22.5
19	14.0	13.5	16.0	13.5	---	---	---	---	26.5	25.0	24.5	23.0
20	13.5	12.0	17.5	15.5	---	---	---	---	26.5	25.5	25.0	23.5
21	12.0	11.0	19.0	17.5	23.5	23.0	---	---	26.5	25.0	25.0	23.5
22	11.5	10.5	18.5	17.5	23.5	20.0	---	---	26.5	23.0	25.0	22.0
23	11.0	11.0	18.5	17.5	22.5	20.0	---	---	24.0	22.5	22.0	20.5
24	12.0	10.5	18.5	17.5	---	---	---	---	24.5	23.0	21.0	20.5
25	12.0	12.0	19.0	18.0	---	---	24.5	24.5	25.0	23.5	20.5	19.5
26	12.0	12.0	20.0	18.5	24.0	22.0	25.0	23.5	25.0	24.0	20.0	18.0
27	13.0	11.5	20.5	19.0	25.5	23.5	25.0	24.0	25.0	24.0	19.0	18.0
28	13.5	12.0	21.0	20.0	26.0	24.5	25.5	23.5	25.5	24.0	19.0	18.0
29	14.0	12.5	22.0	20.0	26.0	24.5	25.0	23.5	25.5	24.5	18.0	16.5
30	14.0	13.5	22.5	19.5	26.0	24.0	24.5	24.0	25.0	23.5	17.5	17.0
31	---	---	22.5	19.5	---	---	23.5	22.5	23.5	21.5	---	---
MONTH	15.5	10.5	22.5	12.0	26.0	19.0	26.0	22.5	26.5	21.5	25.0	16.5
YEAR	26.5	.0										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03202000 RACCOON CREEK AT ADAMSVILLE, OH--Continued
DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.4	6.8	8.8	7.9	10.1	9.2	11.5	11.1	---	---	12.5	12.2
2	8.0	6.9	8.7	7.6	9.8	9.3	12.2	10.7	---	---	12.6	12.4
3	9.2	7.9	8.7	7.7	10.2	9.4	12.7	12.1	---	---	12.5	12.2
4	9.7	8.8	8.6	7.5	10.4	9.6	12.8	12.0	12.0	11.6	12.5	12.3
5	10.2	9.4	8.4	7.2	10.4	9.1	12.3	11.9	12.1	11.7	12.6	12.3
6	10.0	9.5	7.8	7.0	9.1	8.2	11.9	11.6	12.0	11.7	12.4	12.2
7	10.6	9.5	7.8	6.6	9.1	8.6	12.3	11.8	---	---	12.6	12.4
8	10.2	9.6	7.7	6.7	9.6	8.8	12.3	10.1	---	---	12.8	12.6
9	9.9	9.4	8.0	7.4	10.1	9.1	11.4	9.5	---	---	12.8	12.6
10	11.0	9.6	7.8	7.4	11.2	9.6	11.8	11.2	---	---	---	---
11	11.2	10.4	8.8	7.4	11.8	11.0	12.0	10.3	---	---	---	---
12	11.1	10.3	9.2	8.3	12.8	11.1	11.3	9.3	---	---	---	---
13	11.6	10.7	9.8	8.7	12.7	12.3	---	---	---	---	---	---
14	11.5	10.5	10.6	9.5	12.3	12.0	---	---	---	---	---	---
15	11.3	10.2	10.8	9.8	12.3	11.7	---	---	---	---	---	---
16	11.0	10.4	10.3	9.9	11.9	10.6	---	---	---	---	12.3	12.0
17	10.7	9.6	10.0	9.6	11.7	10.1	---	---	---	---	12.5	12.1
18	10.1	9.1	10.5	9.8	11.4	10.1	---	---	---	---	12.5	12.2
19	10.0	9.2	10.5	10.1	11.1	10.1	---	---	---	---	12.3	11.9
20	9.8	8.9	10.4	10.2	10.6	10.1	---	---	---	---	---	---
21	9.6	8.8	10.3	10.1	10.3	9.5	---	---	---	---	---	---
22	9.7	9.0	10.1	9.7	10.5	9.2	---	---	---	---	---	---
23	9.6	8.9	10.0	9.7	10.4	9.5	---	---	---	---	---	---
24	9.7	8.6	9.8	9.5	10.4	10.1	---	---	---	---	---	---
25	9.1	8.5	11.2	9.4	10.5	9.7	---	---	---	---	---	---
26	8.7	8.0	9.9	9.6	10.4	9.4	---	---	---	---	---	---
27	8.5	7.7	10.3	9.8	10.7	9.9	---	---	---	---	---	---
28	8.2	7.5	10.6	9.8	11.9	10.5	---	---	12.2	12.1	---	---
29	8.4	7.2	10.6	10.1	11.8	11.4	---	---	---	---	---	---
30	8.6	7.4	10.4	9.8	11.7	11.5	---	---	---	---	---	---
31	8.8	7.7	---	---	11.5	11.2	---	---	---	---	---	---
MONTH	11.6	6.8	11.2	6.6	12.8	8.2	12.8	9.3	12.2	11.6	12.8	11.9
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	10.0	9.8	---	---	---	---	7.4	7.3	---	---
2	---	---	10.0	9.9	---	---	---	---	---	---	---	---
3	---	---	9.9	9.8	---	---	---	---	7.8	7.5	---	---
4	---	---	9.8	9.6	---	---	---	---	---	---	---	---
5	---	---	10.1	9.6	---	---	8.2	8.1	---	---	---	---
6	---	---	10.1	9.9	---	---	8.1	7.9	---	---	---	---
7	---	---	10.2	10.1	---	---	---	---	---	---	---	---
8	10.0	9.8	10.1	9.6	---	---	---	---	8.4	7.5	---	---
9	10.0	9.7	9.8	9.4	---	---	---	---	8.2	7.4	---	---
10	9.9	9.0	9.5	9.2	---	---	---	---	8.1	7.4	---	---
11	9.7	9.4	9.3	9.0	---	---	8.6	7.9	7.6	7.2	---	---
12	9.8	8.4	---	---	---	---	8.9	7.9	7.4	7.0	---	---
13	9.8	8.0	---	---	---	---	8.8	8.2	7.7	6.8	---	---
14	10.0	9.8	---	---	---	---	8.8	8.0	7.6	7.0	---	---
15	10.0	9.9	---	---	---	---	8.4	8.0	---	---	---	---
16	10.1	9.9	---	---	---	---	---	---	---	---	---	---
17	10.1	10.0	---	---	---	---	---	---	---	---	---	---
18	10.0	9.7	---	---	---	---	---	---	---	---	---	---
19	10.0	9.6	---	---	---	---	---	---	---	---	---	---
20	10.3	10.0	---	---	---	---	---	---	---	---	---	---
21	10.6	10.2	---	---	---	---	---	---	---	---	---	---
22	10.7	10.6	---	---	---	---	---	---	---	---	---	---
23	10.8	10.6	---	---	10.3	8.8	---	---	7.5	7.0	---	---
24	10.8	10.6	---	---	10.9	10.0	---	---	7.5	7.0	---	---
25	10.5	10.3	---	---	---	---	7.6	7.0	7.4	6.4	---	---
26	10.5	10.3	---	---	11.7	10.0	8.3	7.0	7.0	6.7	---	---
27	10.6	10.4	---	---	10.8	9.9	8.3	7.2	7.5	6.5	8.8	8.0
28	10.4	10.2	---	---	10.6	8.1	8.4	7.1	7.4	6.5	8.7	8.1
29	10.2	10.0	---	---	11.1	9.5	8.6	7.3	---	---	9.0	8.3
30	10.0	9.8	---	---	11.3	10.0	7.8	6.4	---	---	9.0	8.4
31	---	---	---	---	---	---	7.4	6.6	---	---	---	---
MONTH	10.8	8.0	10.2	9.0	11.7	8.1	8.9	6.4	8.4	6.4	9.0	8.0
YEAR	12.8	6.4										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03219500 SCIOTO RIVER NEAR PROSPECT, OH

LOCATION.--Lat 40°25'10", long 83°11'50", Delaware County, Hydrologic Unit 05060001, on downstream side of pier of Hoskins Bridge, 1.5 mi (2.4 km) upstream from Ottawa Creek, 2.0 mi (3.2 km) south of Prospect, and 2.5 mi (4.0 km) downstream from Patton Run.

DRAINAGE AREA.--567 mi² (1,469 km²).

PERIOD OF RECORD.--July 1925 to October 1932, October 1939 to current year. Published as "at Prospect" 1925-32. Gage-height records collected in this vicinity since 1915 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 886.9 ft (270.33 m) National Geodetic Vertical Datum of 1912 (levels by Corps of Engineers). July 24, 1925, to Oct. 31, 1932, nonrecording gage at site 2.5 mi (4.0 km) upstream at datum 4.8 ft (1.46 m) higher. Oct. 16 to Dec. 5, 1939, nonrecording gage at present site and datum.

REMARKS.--Records good except those for winter periods and period of no gage-height record, which are fair. Water-quality data collected at this site 1964 to 1977. Sediment data collected 1951 to 1953.

AVERAGE DISCHARGE.--46 years, 453 ft³/s (12.83 m³/s), 10.85 in/yr (276 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,100 ft³/s (286 m³/s) Mar. 22, 1927, gage-height, 15.0 ft (4.57 m), from graph based on gage readings at site and datum then in use, and Jan. 21, 1959, gage height, 15.30 ft (4.663 m); minimum, 3.5 ft³/s (0.099 m³/s) Sept. 13, 1953.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 25, 1913, reached a stage of 21.1 ft (6.43 m), discharge, 27,000 ft³/s (765 m³/s), computed by Franklin County Conservancy District, at site and datum used 1925-32.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,600 ft³/s (102 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 17	1900	6040	171	11.67	3.557	Mar. 29	0200	5240	148	10.71	3.264
Mar. 17	0900	*7920	224	*13.72	4.182	Apr. 22	1200	3640	103	8.71	2.655

Minimum discharge, 10 ft³/s (0.28 m³/s) Sept. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	24	122	220	540	94	1750	306	264	39	19	17
2	69	25	556	170	410	94	1360	268	213	40	17	16
3	72	26	780	150	320	92	1150	232	178	52	35	16
4	109	29	538	140	250	92	1150	213	156	312	41	16
5	95	34	368	130	190	92	1150	210	142	496	27	14
6	77	34	323	130	170	92	1090	201	128	311	23	13
7	57	38	600	120	160	90	1520	184	122	188	23	13
8	50	34	460	130	150	90	1970	167	128	130	24	12
9	59	31	360	270	140	90	1760	163	123	97	21	13
10	76	36	290	480	140	90	1020	173	117	78	22	12
11	200	41	220	840	130	120	698	191	103	65	19	12
12	176	39	170	760	130	330	611	180	95	60	18	12
13	129	36	150	560	120	840	556	217	123	51	18	13
14	97	35	700	420	120	3160	444	352	275	45	17	24
15	78	37	2260	310	120	4140	360	563	358	38	16	19
16	61	39	3740	240	110	6590	305	612	225	35	16	15
17	49	61	5780	180	110	7730	272	500	152	33	16	13
18	43	75	5750	140	110	7180	262	493	122	30	14	12
19	39	85	4940	110	110	6210	772	771	120	28	14	13
20	37	82	4050	90	100	5390	1480	699	111	27	20	13
21	36	81	3000	80	100	5170	2650	479	108	26	17	13
22	33	72	2020	76	100	5540	3560	383	96	24	16	14
23	31	64	1210	70	100	5870	3090	333	83	23	15	12
24	29	65	750	68	98	5510	1950	779	69	23	15	11
25	27	63	891	64	98	4560	1240	1310	59	22	14	11
26	27	63	1100	980	98	3670	893	1240	56	24	13	11
27	23	57	920	300	96	4060	645	741	61	25	13	11
28	23	57	700	820	96	4920	502	483	52	23	23	12
29	25	54	520	1200	---	4990	412	368	47	21	22	11
30	30	50	400	900	---	3820	356	333	43	20	18	12
31	24	---	290	680	---	2520	---	324	---	19	18	---
TOTAL	1921	1467	43958	10828	4416	93236	34978	13468	3929	2405	604	406
MEAN	62.0	48.9	1418	349	158	3008	1166	434	131	77.6	19.5	13.5
MAX	200	85	5780	1200	540	7730	3560	1310	358	496	41	24
MIN	23	24	122	64	96	90	262	163	43	19	13	11
CFSM	.11	.09	2.50	.62	.28	5.31	2.06	.77	.23	.14	.03	.02
IN.	.13	.10	2.88	.71	.29	6.12	2.29	.88	.26	.16	.04	.03

CAL YR 1977 TOTAL 121066 MEAN 332 MAX 5780 MIN 11 CFSM .59 IN 7.94
WTR YR 1978 TOTAL 211616 MEAN 580 MAX 7730 MIN 11 CFSM 1.02 IN 13.88

Note: No gage-height record Jan. 4 to Mar. 18.

03220000 MILL CREEK NEAR BELLEPOINT, OH

LOCATION.--Lat 40°18'58", long 83°10'26", Delaware County, Hydrologic Unit 05060001, on left bank at upstream side of county road bridge, 1.2 mi (1.9 km) west of Bellepoint, 1.5 mi (2.4 km) upstream from mouth, and 2.3 mi (3.7 km) downstream from Blues Creek.

DRAINAGE AREA.--178 mi² (461 km²).

PERIOD OF RECORD.--October 1942 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 865.14 ft (263.695 m) (levels by students of Ohio State University, City of Columbus bench mark). Prior to Jan. 1, 1948, nonrecording gage, at same site and datum. 1, 1948, nonrecording gage, at same site and datum.

REMARKS.--Records good except those for winter periods and no gage-height record, which are fair. Diurnal fluctuation caused by stone quarry upstream from station. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--36 years, 149 ft³/s (4.220 m³/s) 11.37 in/yr (289 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,300 ft³/s (575 m³/s) Jan. 21, 1959, gage height, 13.85 ft (4.221 m), from rating curve extended above 14,000 ft³/s (396 m³/s); no flow Sept. 25, 26, 1944, Sept. 19, 1948.

EXTREMES OUTSIDE PERIOD OF RECORD.--A stage of 18.0 ft (5.49 m) occurred in March 1913.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,500 ft³/s (70.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 16	0045	3650	103	7.55	2.301	Mar. 21	1745	2580	73.1	6.60	2.012
Mar. 15	1830	*5750	163	*8.99	2.740	Mar. 26	2230	2540	71.9	6.55	1.996

Minimum daily discharge, 2.8 ft³/s (0.079 m³/s) Sept. 9, 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	184	7.2	664	48	613	30	229	58	30	12	5.2	5.4
2	236	6.8	644	44	488	30	188	50	27	14	5.2	5.0
3	80	6.5	268	36	396	30	226	43	25	93	10	4.4
4	33	10	168	32	325	30	328	43	21	153	59	4.0
5	18	13	291	29	274	30	229	54	17	80	49	3.6
6	13	11	465	29	236	30	436	49	15	40	23	3.4
7	12	12	200	33	202	30	990	47	20	23	13	3.3
8	17	25	120	367	170	30	426	43	78	16	12	3.0
9	41	15	91	572	140	30	204	50	77	12	9.7	2.8
10	71	14	61	271	120	34	139	45	34	9.3	8.8	3.1
11	45	17	64	190	100	60	127	39	23	8.4	7.6	2.9
12	27	14	54	150	90	103	122	38	18	7.6	8.4	2.8
13	19	12	53	110	80	226	100	197	22	7.2	6.5	2.8
14	15	11	2000	90	68	2110	71	789	20	6.8	5.8	6.8
15	12	9.7	3430	70	60	3790	55	769	21	6.5	5.5	5.6
16	9.3	11	2550	60	54	3770	47	364	33	5.5	8.4	4.5
17	7.2	13	1180	54	48	2110	42	347	139	4.9	6.8	3.8
18	7.2	18	838	44	44	1360	195	214	65	4.9	6.5	3.3
19	7.6	26	644	36	40	925	952	142	32	4.6	5.5	3.5
20	8.0	26	442	32	38	1280	838	100	22	4.3	4.9	3.5
21	7.2	27	396	27	36	2150	1000	77	17	4.3	4.6	3.5
22	6.8	35	207	25	35	2200	554	61	14	4.9	5.8	3.7
23	8.0	23	109	23	34	1800	258	59	13	4.6	4.9	3.3
24	8.0	18	116	22	33	957	231	294	13	10	6.1	3.0
25	6.8	17	769	46	32	660	277	300	24	16	11	3.0
26	6.1	15	402	309	31	1630	384	144	58	10	8.0	3.0
27	6.1	13	146	701	30	2190	216	85	138	8.4	7.2	3.0
28	8.8	13	88	899	30	1010	124	58	127	8.4	9.3	3.0
29	9.7	11	80	1040	---	594	89	47	46	8.4	13	3.0
30	8.0	34	66	957	---	375	71	57	20	7.6	18	3.2
31	6.8	---	56	798	---	263	---	41	---	6.1	6.2	---
TOTAL	944.6	484.2	16662	7150	3847	29867	9178	4704	1209	601.7	354.9	109.2
MEAN	30.5	16.1	537	231	137	963	306	152	40.3	19.4	11.4	3.64
MAX	236	35	3430	1040	613	3790	1000	789	139	153	59	6.8
MIN	6.1	6.5	53	22	30	30	42	38	13	4.3	4.6	2.8
CFSM	.17	.09	3.02	1.30	.77	5.41	1.72	.85	.23	.11	.06	.02
IN.	.20	.10	3.48	1.49	.80	6.24	1.92	.98	.25	.13	.07	.02

CAL YR 1977 TOTAL 46908.4 MEAN 129 MAX 4040 MIN 1.9 CFSM .73 IN 9.80
WTR YR 1978 TOTAL 75111.6 MEAN 206 MAX 3790 MIN 2.8 CFSM 1.16 IN 15.70

Note: No gage height record June 21-28, Aug. 30 to Sept. 30.

03221000 SCIOTO RIVER BELOW O'SHAUGHNESSY DAM, NEAR DUBLIN, OH

LOCATION.--Lat 40°08'36", long 83°07'14", Delaware County, Hydrologic Unit 05060001, on left bank, 0.2 mi (0.3 km) north of county line, 0.8 mi (1.3 km) downstream from O'Shaughnessy Dam, and 3.0 mi (4.8 km) north of Dublin.

DRAINAGE AREA.--980 mi² (2,538 km²).

PERIOD OF RECORD.--April 1921 to current year.

REVISED RECORDS.--WSP 803: 1924-35. WSP 1725: 1924. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 775.00 ft (236.220 m) National Geodetic Vertical Datum of 1912. Prior to Aug. 26, 1921, nonrecording gage at site 0.8 mi (1.3 km) upstream at same datum. Aug. 26, 1921, to Oct. 13, 1924, nonrecording gage at site 100 ft (30 m) downstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated since 1924 by O'Shaughnessy Reservoir 0.8 mi (1.3 km) upstream (see station 03220500). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--57 years, 782 ft³/s (22.15 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,200 ft³/s (1,560 m³/s) Jan. 22, 1959, gage height, 22.04 ft (6.718 m), from floodmark; minimum daily, 0.4 ft³/s (0.011 m³/s) Nov. 8, 1924.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 25, 1913 reached a stage of 24.6 ft (7.50 m), discharge, 74,500 ft³/s (2,110 m³/s) at Griggs Dam, 9 mi (4 km) downstream from gage, computed by C.E. Sherman, Ohio State University.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,700 ft³/s (416 m³/s) Mar. 16, gage height, 12.13 ft (3.697 m); minimum daily, 18 ft³/s (0.510 m³/s) Nov. 5, Aug. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	338	43	831	340	977	150	2500	495	459	101	34	29
2	348	95	1030	280	872	150	1950	436	373	98	31	34
3	196	137	1210	250	743	150	1800	398	319	130	81	36
4	134	73	915	240	657	150	1850	367	273	187	95	34
5	137	18	1000	240	596	150	1800	367	252	436	107	33
6	144	19	1140	240	538	150	1930	353	231	483	98	81
7	98	48	596	250	507	150	3360	333	227	353	75	98
8	117	78	404	822	448	150	3050	323	278	264	56	75
9	127	78	362	1340	404	150	2530	338	278	200	52	98
10	148	78	282	847	367	150	1730	314	247	163	65	68
11	171	68	286	620	343	150	1180	300	215	127	48	123
12	243	95	256	490	314	219	977	305	204	127	44	148
13	207	56	256	400	280	383	855	519	179	110	41	65
14	159	54	3980	350	260	4010	685	1370	183	98	36	50
15	127	63	7860	300	250	9300	563	1880	309	83	30	48
16	127	86	8370	260	230	12000	465	1420	348	81	33	81
17	56	101	8510	240	220	12600	425	1200	286	59	36	134
18	70	104	7880	220	210	10600	459	942	239	52	36	148
19	81	123	6640	200	200	9440	2140	942	362	48	36	68
20	54	137	5230	180	190	8530	3020	1040	309	48	36	89
21	56	183	4140	170	180	9690	4880	822	273	44	24	196
22	63	148	2810	160	180	10300	5050	623	223	43	23	148
23	54	117	1790	160	170	10300	4150	550	183	52	23	117
24	52	101	1200	160	170	8440	2870	2540	155	68	23	113
25	54	101	2070	243	160	6480	2060	2130	134	61	48	75
26	65	89	1950	602	160	7060	1700	1920	120	52	18	63
27	56	81	1400	872	150	8860	1240	1310	123	52	37	75
28	68	81	831	1030	150	7790	924	847	137	59	59	44
29	50	78	602	1090	---	6710	728	650	148	43	141	44
30	34	163	480	1120	---	5270	602	616	123	44	59	44
31	34	---	400	1060	---	3630	---	576	---	39	27	---
TOTAL	3668	2696	74711	14776	9926	153262	57483	26226	7190	3805	1552	2459
MEAN	118	89.9	2410	477	355	4944	1916	846	240	123	50.1	82.0
MAX	348	183	8510	1340	977	12600	5050	2540	459	483	141	196
MIN	34	18	256	160	150	150	425	300	120	39	18	29

CAL YR 1977 TOTAL 207320.7 MEAN 568 MAX 8960 MIN 5.2
WTR YR 1978 TOTAL 357754.0 MEAN 980 MAX 12600 MIN 18

SCIOTO RIVER BASIN

03223000 OLENTANGY RIVER AT CLARIDON, OH

LOCATION.--Lat 40°34'58", long 82°59'20", in NW 1/4 sec. 26, T.5 S., R.16 E., Marion County, Hydrologic Unit 05060001, on left bank 900 ft (274 m) downstream from bridge on State Highway 95, 0.5 mi (0.8 km) east of Claridon, 0.8 mi (1.3 km) downstream from Otter Creek, and 1.4 mi (2.3 km) upstream from Beaver Run.

DRAINAGE AREA.--157 mi² (407 km²).

PERIOD OF RECORD.--October 1946 to current year.

REVISED RECORDS.--WSP 1235: 1947, 1948(P). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 961.72 ft (293.132 m) National Geodetic Vertical Datum of 1929. (levels by Corps of Engineers). Prior to Aug. 18, 1969 water-stage recorder at site 1,000 ft (305 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--32 years, 150 ft³/s (4.248 m³/s), 12.98 in/yr 330 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,900 ft³/s (422 m³/s) Jan. 22, 1959, gage height, 16.77 ft (5.111 m), from rating curve extended above 4,700 ft³/s (133 m³/s) on basis of contracted-opening measurement of peak flow; no flow Oct. 2-26, 1953, Sept. 14-22, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,500 ft³/s (42.5 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 15	1900	*5020	142	*12.58	3.834	Mar. 27	1900	1760	49.8	8.89	2.710
Mar. 16	0100	4260	121	11.96	3.645	May 24	2130	2820	79.9	10.45	3.185
Mar. 22	1000	1680	47.6	8.74	2.664						

Minimum daily discharge, 1.1 ft³/s (0.031 m³/s) Sept. 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	10	431	56	340	26	290	67	96	12	3.8	4.0
2	30	10	585	52	270	26	216	59	68	13	3.5	3.7
3	33	10	260	48	230	26	234	53	57	17	11	4.0
4	19	11	120	45	190	26	378	50	49	25	18	3.2
5	14	15	105	43	160	26	302	55	43	20	19	2.7
6	12	25	92	45	120	26	327	52	38	15	9.4	2.5
7	11	22	85	46	96	26	672	46	35	12	7.6	2.4
8	21	17	82	190	84	26	410	46	40	11	6.2	2.2
9	63	16	80	220	72	26	224	56	42	10	6.0	1.9
10	109	17	80	180	64	27	172	67	32	9.7	8.2	2.0
11	63	15	80	160	58	69	163	51	27	8.5	6.7	2.0
12	38	15	81	140	52	109	231	45	27	7.6	7.7	2.4
13	28	16	81	120	48	286	171	90	36	7.4	6.3	3.2
14	23	14	1320	105	45	1430	112	222	39	7.8	5.6	3.4
15	19	13	4800	92	43	3780	88	183	28	7.6	5.5	7.1
16	17	14	3150	84	41	3700	78	128	24	7.4	4.4	4.6
17	15	74	1570	72	40	2390	71	110	22	6.8	3.9	3.9
18	15	204	856	64	37	1730	75	370	20	6.0	3.7	4.5
19	14	97	564	58	39	1250	413	376	27	5.7	4.5	9.3
20	14	56	350	53	38	1100	613	183	58	5.3	8.1	4.8
21	13	43	250	51	37	1290	1260	135	37	5.7	5.3	3.2
22	13	37	190	50	37	1630	1020	115	25	6.0	6.3	2.6
23	12	33	150	52	37	1410	440	91	21	4.9	4.7	2.2
24	11	30	130	74	36	786	296	1290	18	5.8	3.7	1.7
25	11	28	115	172	26	482	236	1950	17	5.7	3.4	1.4
26	10	26	100	624	26	813	171	1410	16	5.1	3.3	1.4
27	11	25	90	869	26	1520	127	363	18	4.6	3.7	1.4
28	11	24	84	984	26	1420	101	221	20	4.6	7.0	1.1
29	10	24	72	700	---	718	86	149	17	4.3	4.8	1.1
30	10	30	66	560	---	402	76	106	15	4.1	3.8	1.3
31	10	---	60	450	---	319	---	112	---	4.0	3.8	---
TOTAL	700	971	16079	6439	2318	26895	9253	8251	1012	269.6	198.9	91.2
MEAN	22.6	32.4	519	208	82.8	868	308	266	33.7	8.70	6.42	3.04
MAX	109	204	4800	984	340	3780	1260	1950	96	25	19	9.3
MIN	10	10	60	43	26	26	71	45	15	4.0	3.3	1.1
CFSM	.14	.21	3.31	1.33	.53	5.53	1.96	1.69	.22	.06	.04	.02
IN.	.17	.23	3.81	1.53	.55	6.37	2.19	1.95	.24	.06	.05	.02

CAL YR 1977 TOTAL 52589.0 MEAN 144 MAX 4800 MIN 3.4 CFSM .92 IN 12.46
WTR YR 1978 TOTAL 72477.7 MEAN 199 MAX 4800 MIN 1.1 CFSM 1.27 IN 17.17

03225500 OLENTANGY RIVER NEAR DELAWARE, OH

LOCATION.--Lat 40°21'18", long 83°04'02", in NE 1/4 T.5 N., R.19 W., Delaware County, Hydrologic Unit 05060001, on left bank 500 ft (152 m) upstream from highway bridge, 1,000 ft (305 m) downstream from Delaware Dam, 1,300 ft (396 m) upstream from Norfolk and Western Railway bridge, and 4.0 mi (6.4 km) north of Delaware.

DRAINAGE AREA.--393 mi² (1,018 km²).

PERIOD OF RECORD.--October 1923 to September 1934, April 1938 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 799.58 ft (243.712 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Oct. 1, 1950, water-stage recorder at site 500 ft (152 m) downstream at datum 76.7 ft (23.38 m) higher.

REMARKS.--Records good. Flow completely regulated by Delaware Lake since 1951 (see station 03225000). Water-quality data collected at this site 1965 to 1977. Water-temperature data collected 1946 to 1961.

AVERAGE DISCHARGE.--51 years, 345 ft³/s (9.770 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,100 ft³/s (399 m³/s) Mar. 21, 1927, gage height, 16.9 ft (5.15 m), site and datum then in use; minimum daily, 0.1 ft³/s (0.003 m³/s) Sept. 14-29, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,780 ft³/s (135 m³/s) Mar. 19, gage height, 87.27 ft (26.600 m); minimum daily, 6.4 ft³/s (0.18 m³/s) Nov. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	18	360	64	801	69	4400	175	238	23	34	21
2	21	11	470	45	507	69	3840	141	271	23	36	19
3	21	7.3	620	27	332	69	2700	141	362	33	37	19
4	21	7.0	869	22	230	69	650	142	90	38	37	19
5	21	6.7	1080	23	195	69	604	142	72	102	37	18
6	22	6.4	1160	56	160	70	830	142	74	130	37	19
7	21	7.0	739	92	145	69	1310	142	103	77	37	19
8	50	8.7	448	151	130	69	1430	142	117	50	37	18
9	395	8.3	286	1170	115	69	1170	145	133	22	37	19
10	79	8.0	220	1570	105	108	650	145	97	22	37	19
11	21	8.0	220	629	95	126	438	148	63	17	37	19
12	21	8.0	169	280	89	129	339	107	48	19	37	19
13	21	8.3	148	200	53	202	402	147	49	22	37	19
14	21	8.3	1310	150	78	336	431	410	47	22	37	19
15	22	8.8	3700	110	73	123	431	602	47	22	37	19
16	22	8.8	4140	80	80	95	428	642	47	22	37	19
17	22	8.8	4130	66	74	480	196	424	47	22	37	18
18	21	8.8	4080	63	67	2520	53	436	46	22	37	18
19	21	8.0	3990	60	67	4140	565	870	46	22	37	18
20	21	7.3	2220	57	67	4260	1140	708	46	22	37	18
21	78	206	999	56	100	3680	472	516	76	28	30	18
22	332	280	764	55	113	3850	665	254	110	32	29	18
23	19	127	383	55	114	4010	2650	201	119	32	29	18
24	20	76	230	54	114	4380	2740	901	74	32	31	18
25	20	76	937	102	114	4390	1400	3040	45	31	31	18
26	20	76	1640	318	114	1930	641	3420	30	31	31	18
27	19	76	658	853	83	85	504	1900	23	31	31	18
28	20	110	398	1040	69	39	333	664	23	31	31	18
29	22	160	210	1040	---	984	246	352	23	31	31	18
30	22	230	140	1370	---	2890	246	220	23	30	32	18
31	22	---	100	1460	---	4430	---	189	---	30	31	---
TOTAL	1482	1588.5	36818	11318	4284	43809	31904	17608	2589	1071	1073	556
MEAN	47.8	53.0	1188	365	153	1413	1063	568	86.3	34.5	34.6	18.5
MAX	395	280	4140	1570	801	4430	4400	3420	362	130	37	21
MIN	19	6.4	100	22	53	39	53	107	23	17	29	18

CAL YR 1977 TOTAL 110523.5 MEAN 303 MAX 4140 MIN 6.4
WTR YR 1978 TOTAL 154100.5 MEAN 422 MAX 4430 MIN 6.4

03226800 OLENTANGY RIVER NEAR WORTHINGTON, OH

LOCATION.--Lat 40°06'37", long 83°01'55", in NW 1/4 T.2N., R.18W., Franklin County, Hydrologic Unit 05060001, on left bank 350 ft (107 m) downstream from Interstate Highway 270 bridge, 1.5 mi (2.4 km) northwest of Worthington and 2.8 mi (4.5 km) upstream from Rush Run.

DRAINAGE AREA.--497 mi² (1,287 km²).

PERIOD OF RECORD.--October 1955 to current year.

REVISED RECORDS.--WSP 1625: 1952(M). WSP 1908: Drainage area. WRD Ohio 1972: 1971(M).

GAGE.--Water-stage recorder. Datum of gage is 743.20 ft (226.527 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods and no gage height record, which are fair. Flow regulated by Delaware Lake 21 mi (34 km) upstream (see station 03225000). Water-quality data collected at this site 1965 to 1977. Water-temperature records collected 1955 to 1968.

AVERAGE DISCHARGE.--23 years, 444 ft³/s (12.57 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,500 ft³/s (467 m³/s) Jan. 21, 1959, gage height, 15.68 ft (4.779 m), from high-water mark in well; minimum daily, 8.5 ft³/s (0.24 m³/s) Sept. 26, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in January 1952 reached a stage of 15.3 ft (4.66 m), discharge, 15,100 ft³/s (428 m³/s), from information by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,010 ft³/s (170 m³/s) Mar. 19, gage height, 7.96 ft (2.426 m); minimum daily, 13 ft³/s (0.37 m³/s) Nov. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	280	35	1020	229	1600	106	4960	249	244	33	39	36
2	200	34	938	224	700	99	4910	164	260	38	39	35
3	150	29	1010	387	450	106	3760	158	468	72	83	34
4	47	24	969	304	350	104	963	161	140	66	77	34
5	40	19	1680	68	270	101	622	181	101	65	50	30
6	46	17	1410	55	230	101	1070	166	91	117	56	28
7	49	20	1490	101	200	101	1580	158	99	125	58	27
8	68	19	1410	785	180	95	1560	174	196	77	53	26
9	394	14	441	1050	160	97	1330	270	174	61	47	27
10	244	19	461	2220	150	94	847	189	142	38	60	25
11	79	19	539	2250	140	110	561	168	99	31	52	25
12	50	15	489	2250	130	150	422	168	81	29	44	25
13	43	14	270	2050	120	220	415	584	87	23	40	20
14	38	13	3430	1690	110	360	451	776	66	27	37	19
15	33	14	4760	1690	100	200	435	794	65	31	34	19
16	35	21	5100	1530	96	130	448	856	61	28	33	20
17	35	55	4940	1030	92	340	366	768	60	28	34	23
18	36	47	4740	489	86	2330	142	561	63	28	32	20
19	35	32	4690	653	84	4980	659	847	468	27	29	19
20	35	24	3120	592	88	5190	1280	912	142	26	36	18
21	34	132	1310	922	100	5590	1470	630	178	26	39	19
22	304	415	803	894	171	4620	441	408	130	26	34	17
23	95	265	622	922	164	4800	2720	254	132	38	32	17
24	33	108	265	507	178	5190	3170	1700	125	61	31	17
25	29	95	768	693	151	5250	2130	3210	81	50	30	17
26	33	99	1990	540	138	4890	945	4000	65	43	27	18
27	34	99	2100	1300	148	1300	542	2820	72	43	27	18
28	32	113	2100	2000	108	510	452	675	50	44	40	18
29	33	265	1340	1900	---	717	298	468	40	42	48	18
30	34	496	254	2300	---	2500	287	287	34	40	43	18
31	35	---	229	2800	---	5030	---	287	---	39	38	---
TOTAL	2633	2571	54918	34625	6724	55221	39296	23255	4014	1422	1322	687
MEAN	84.9	85.7	1772	1123	240	1781	1310	750	134	45.9	42.6	22.9
MAX	394	496	5100	2800	1800	5590	4960	4000	468	125	83	36
MIN	29	13	229	55	84	94	142	158	34	23	27	17

CAL YR 1977 TOTAL 149118 MEAN 409 MAX 5100 MIN 13
WTR YR 1978 TOTAL 226885 MEAN 622 MAX 5590 MIN 13

Note: No gage-height record Aug. 11 to Sept. 13.

03227500 SCIOTO RIVER AT COLUMBUS, OH

LOCATION.--Lat 39°54'34", long 83°00'33", Franklin County, Hydrologic Unit 05060001, on right bank at sewage-treatment plant of city of Columbus, 0.4 mi (0.6 km) downstream from bridge on Frank Road, 2.8 mi (4.5 km) upstream from Scioto Big Run, and 5 mi (8 km) downstream from Olentangy River.

DRAINAGE AREA.--1,629 mi² (4,219 km²).

PERIOD OF RECORD.--October 1920 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 743: 1927(M). WSP 803: 1922-24, 1926-30, 1932-33. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 680.00 ft (207.264 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1924, nonrecording gage at site 200 ft (61 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Griggs Reservoir 10.4 mi (16.7 km) upstream (see station 03221500), O'Shaughnessy Reservoir 20.4 mi (32.8 km) upstream (see station 03220500), and Delaware Lake 35 mi (56 km) upstream from station (see station 03225000). Records include sewage return flow from Frank Road Treatment Plant. Shadeville Treatment Plant flow enters downstream. Water supply for city of Columbus is obtained from Scioto River downstream from Griggs Dam, Big Walnut Creek downstream from Central College, and from well field in Alum Creek basin. For statement on diversions from Alum Creek basin and Big Walnut Creek, see REMARKS for stations 03229000 and 03229500. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--58 years, 1,375 ft³/s (38.9 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 68,200 ft³/s (1,930 m³/s) Jan. 22, 1959, gage height, 27.22 ft (8.297 m), from high-water mark in well, from rating curve extended above 46,000 ft³/s (1,300 m³/s); minimum daily, 47 ft³/s (1.33 m³/s) Sept. 6, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 25, 1913 reached a stage of 25.9 ft (7.89 m), discharge, 138,000 ft³/s (3,910 m³/s), estimated by Franklin County Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,300 ft³/s (433 m³/s) Mar. 21, gage height, 17.88 ft (5.450 m); minimum daily, 126 ft³/s (3.57 m³/s) Oct. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2920	145	2920	680	780	240	7850	1050	940	311	149	352
2	1500	145	2410	620	680	240	6960	884	864	606	145	219
3	674	142	2690	560	620	240	5880	789	867	583	215	182
4	415	190	2320	520	580	240	3270	861	730	421	241	153
5	331	178	4000	514	540	240	2670	895	520	465	215	149
6	597	130	4010	516	500	240	3150	765	457	710	640	211
7	321	273	2420	600	470	240	4940	714	550	692	512	190
8	578	166	1390	2630	450	240	5010	781	721	545	250	162
9	727	138	1180	2930	430	250	4310	1050	745	421	198	202
10	776	170	810	3010	410	340	3170	796	572	347	255	149
11	491	162	732	2500	390	520	2210	684	486	283	224	170
12	399	138	733	1200	380	820	1760	701	497	226	415	211
13	415	142	934	680	360	1410	1530	1720	470	246	219	198
14	316	134	7310	500	350	7440	1410	2290	367	232	186	178
15	255	134	12800	420	340	13000	1260	3050	383	215	190	237
16	224	224	13200	360	320	13200	1130	2880	518	228	246	246
17	215	539	13200	330	310	13800	1070	2920	497	182	202	228
18	178	316	12600	310	300	12600	1010	1950	470	166	182	228
19	178	241	11600	300	290	13800	2080	1860	1170	149	202	246
20	178	237	9730	280	280	13600	4060	2220	727	130	246	194
21	162	806	6400	270	270	14600	6020	1790	645	142	170	194
22	186	806	4170	260	260	14300	5620	1390	578	134	174	268
23	449	680	3000	260	260	14700	6440	1100	470	158	170	228
24	178	481	1880	400	250	13600	6570	2990	426	307	162	211
25	145	347	2480	765	250	12100	5130	4660	383	268	153	219
26	190	336	3900	2720	240	13500	3660	5780	518	215	149	186
27	158	278	2880	2100	240	11700	2270	4870	321	174	170	166
28	145	297	1790	1600	240	9380	1850	2240	692	174	460	174
29	138	399	1180	1300	---	7810	1390	1450	367	162	292	162
30	126	1170	900	1100	---	8000	1190	1190	307	153	529	186
31	134	---	780	920	---	8930	---	1230	---	166	824	---
TOTAL	13609	9536	136349	31155	10790	221320	104870	57550	17258	9213	8385	6099
MEAN	439	318	4398	1005	385	7139	3496	1856	575	297	270	203
MAX	2920	1170	13200	3010	780	14700	7850	5780	1170	710	824	352
MIN	126	130	732	260	240	240	1010	684	307	130	145	149

CAL YR 1977 TOTAL 417759 MEAN 1145 MAX 13200 MIN 120
WTR YR 1978 TOTAL 626134 MEAN 1715 MAX 14700 MIN 126

03228500 BIG WALNUT CREEK AT CENTRAL COLLEGE, OH

LOCATION.--Lat 40°06'13", long 82°53'03", T.2 N., R.17 W., Franklin County, Hydrologic Unit 05060001, on right bank at upstream side of county road bridge, 0.2 mi (0.3 km) east of Central College, 0.4 mi (0.6 km) downstream from Hoover Dam, and 3 mi (5 km) southeast of Westerville.

DRAINAGE AREA.--190 mi² (492 km²).

PERIOD OF RECORD.--July 1938 to current year.

REVISED RECORDS.--WSP 873: 1938. WSP 1435: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 815.16 ft (248.461 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow completely regulated by Hoover Reservoir since September 1954 (see station 03228400). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--40 years, 184 ft³/s (5.211 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,800 ft³/s (674 m³/s) Jan. 21, 1959, gage height, 19.75 ft (6.020 m), from rating curve extended above 7,200 ft³/s (204 m³/s) on basis of computation of peak flow over Hoover Dam; no flow for many days in 1944 and 1955.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,260 ft³/s (92.3 m³/s) Mar. 15, gage height, 9.70 ft (2.957 m); minimum daily, 98 ft³/s (2.775 m³/s) Nov. 26, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	252	173	202	100	592	100	171	183	171	140	126	125
2	165	177	125	100	824	100	169	106	173	140	126	125
3	106	175	130	100	1030	100	169	121	173	140	126	125
4	109	175	126	100	534	100	306	128	171	138	125	125
5	103	175	198	110	267	100	344	128	171	136	121	125
6	105	175	185	125	200	100	544	126	167	136	123	167
7	108	169	128	125	156	100	1380	126	165	136	123	145
8	114	177	128	607	126	100	496	128	169	135	120	126
9	135	175	136	1730	120	100	235	130	202	135	120	130
10	128	175	131	713	120	100	175	128	198	135	116	130
11	131	152	116	440	120	100	183	128	171	131	116	130
12	131	138	116	264	120	110	193	130	156	130	121	130
13	130	138	130	164	110	120	191	189	151	152	118	123
14	128	138	240	152	110	785	165	506	147	140	118	121
15	128	138	226	138	110	2670	156	544	145	142	123	121
16	128	140	450	130	110	2640	143	333	143	143	128	130
17	128	142	726	136	110	1380	131	614	143	142	126	125
18	128	138	417	142	110	420	120	496	143	140	126	120
19	128	136	279	142	110	626	443	245	196	145	126	120
20	128	136	284	262	110	912	588	245	164	175	126	120
21	128	130	350	336	110	1990	1360	247	377	164	126	126
22	128	116	269	292	100	1560	641	240	417	154	126	123
23	128	114	284	250	100	887	300	242	185	156	125	120
24	128	116	204	158	100	610	267	284	152	160	125	120
25	128	106	633	171	100	503	316	685	149	151	130	120
26	128	98	295	383	100	2200	459	333	149	142	116	120
27	156	98	177	489	100	2670	235	257	147	136	136	120
28	173	103	164	883	100	1220	151	191	145	136	128	120
29	171	109	158	816	---	472	228	169	143	131	175	120
30	171	169	105	730	---	295	226	171	142	128	208	126
31	171	---	100	595	---	219	---	171	---	126	185	---
TOTAL	4223	4301	7212	10883	5899	23389	10515	7724	5325	4395	4034	3778
MEAN	136	143	233	351	211	754	351	249	178	142	130	126
MAX	252	177	726	1730	1030	2670	1380	685	417	175	208	167
MIN	103	98	100	100	100	100	120	106	142	126	116	120

CAL YR 1977 TOTAL 54826 MEAN 150 MAX 1890 MIN 84
WTR YR 1978 TOTAL 91678 MEAN 251 MAX 2670 MIN 98

SCIOTO RIVER BASIN

03228750 ALUM CREEK NEAR KILBOURNE, OH

LOCATION.--Lat 40°21'24", long 82°55'18", T.5 N., R.17 W., Delaware County, Hydrologic Unit 05060001, on left bank at upstream side of bridge on County Road 38, 100 ft (30 m) downstream from West Branch Alum Creek, and 2.6 mi (4.2 km) northeast of Kilbourne.

DRAINAGE AREA.--64.9 mi² (168 km²).

PERIOD OF RECORD.--November 1973 to current year.

REVISED RECORDS.--WDR OH-75-1: 1974(M).

GAGE.--Water-stage recorder. Datum of gage is 900.99 ft (274.622 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Water-quality data collected at this site 1973 to 1977.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,850 ft³/s (137 m³/s) Feb. 24, 1975, gage height, 12.05 ft (3.673 m); minimum, 0.56 ft³/s (0.016 m³/s) Aug. 1, 2, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28.3 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 14	1515	*2910	82.4	9.79	2.984	Mar. 21	0430	2050	50.1	8.60	2.621
Jan. 26	---	1400	53.8	ice jam		Mar. 27	0315	1420	80.2	7.28	2.219
Mar. 14	---	1900	53.8	*a11.88	3.621						

Minimum discharge, 0.79 ft³/s (0.022 m³/s) Aug. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	5.3	272	25	30	10	80	48	56	4.0	2.2	13
2	20	5.7	113	24	28	10	65	45	50	5.3	1.9	6.4
3	7.8	5.7	63	22	26	10	115	38	41	161	6.6	3.6
4	4.6	6.4	54	21	24	10	127	39	34	81	5.7	2.4
5	3.4	9.0	183	21	22	9.0	86	39	30	29	3.3	1.6
6	6.6	7.1	235	23	21	9.0	260	35	23	18	3.1	1.3
7	8.1	6.8	77	26	20	9.0	326	32	37	13	3.5	1.6
8	14	6.7	64	387	19	9.0	119	33	85	10	2.9	1.5
9	42	6.2	50	375	18	15	76	48	37	8.5	2.3	1.4
10	23	6.1	51	260	17	40	64	44	22	7.4	2.0	1.4
11	12	6.6	35	190	17	100	79	34	16	6.5	1.9	1.3
12	7.9	6.2	31	120	16	247	83	31	13	5.3	1.9	1.3
13	6.1	5.4	53	90	15	631	57	89	14	4.8	1.7	1.4
14	5.0	5.0	2060	64	15	1000	47	111	12	4.4	1.6	1.5
15	4.7	5.2	923	45	14	500	45	88	9.7	3.8	1.6	1.6
16	5.0	6.8	297	36	14	380	40	81	8.5	3.4	1.5	1.6
17	4.5	17	185	30	14	450	41	81	7.7	2.9	1.6	1.6
18	4.6	17	125	26	13	700	51	299	7.0	2.3	1.5	1.6
19	4.8	11	91	24	12	1160	138	126	108	2.0	1.4	1.5
20	5.0	8.1	105	22	12	1410	240	75	41	2.3	1.3	1.3
21	5.4	13	84	21	12	1150	502	67	23	2.0	1.2	1.2
22	5.6	18	51	20	11	439	230	51	14	2.0	1.1	1.2
23	5.7	12	48	20	11	269	136	47	9.4	2.5	1.0	1.1
24	5.1	10	47	34	11	165	118	440	7.2	5.1	1.0	1.1
25	5.2	8.7	390	150	11	201	99	236	6.3	3.7	.93	1.2
26	4.9	8.4	86	962	10	807	87	120	5.9	3.1	1.4	1.1
27	5.1	9.4	56	500	10	936	73	89	9.8	2.7	3.1	1.0
28	5.3	7.3	38	250	10	269	65	72	6.8	2.5	17	1.0
29	5.2	6.9	32	120	---	149	61	48	5.4	2.2	7.6	.93
30	5.7	34	30	50	---	98	53	48	4.5	2.2	5.7	1.0
31	5.3	---	26	34	---	89	---	76	---	2.5	14	---
TOTAL	276.6	261.0	5955	3992	453	11281.0	3563	2710	744.2	405.4	103.53	59.73
MEAN	8.92	9.37	192	129	16.2	364	119	87.4	24.8	13.1	3.34	1.99
MAX	42	34	2060	962	30	1410	502	440	108	161	17	13
MIN	3.4	5.0	26	20	10	9.0	40	31	4.5	2.0	.93	.93
CFSM	.14	.14	2.96	1.99	.25	5.61	1.83	1.35	.38	.20	.05	.03
IN.	.16	.16	3.41	2.29	.26	6.47	2.04	1.55	.43	.23	.06	.03

CAL YR 1977 TOTAL 22529.83 MEAN 61.7 MAX 2430 MIN .93 CFSM .95 IN 12.91
WTR YR 1978 TOTAL 29824.46 MEAN 81.7 MAX 2060 MIN .93 CFSM 1.26 IN 17.09

a ice jam

SCIOTO RIVER BASIN

03228805 ALUM CREEK AT AFRICA, OH

LOCATION.--Lat 40°11'00", long 82°57'47", in SE 1/4 sec. 1, T.3 N., R.18 W., Delaware County, Hydrologic Unit 05060001, on right bank 400 ft (122 m) upstream of bridge on Lewis Center Road, 1,200 ft (366 m) downstream from outlet of Alum Creek dam, 0.3 mi (0.5 km) west of Africa, 2.8 mi (4.5 km) upstream from Westerville Reservoir outlet, and 4.2 mi (6.8 km) northwest of Westerville.

DRAINAGE AREA.--122 mi² (316 km²).

PERIOD OF RECORD.--Water year 1962 (occasional low-flow measurements) June 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 800.00 ft (243.840 m) National Geodetic Vertical Datum of 1929. (levels by Corps of Engineers). Oct. 17, 1973 to July 9, 1974 nonrecording gage at bridge 400 ft (121.920 m) downstream at same datum. Prior to Oct. 17, 1973 water-stage recorder 600 ft (182.880 m) downstream at datum 17.37 ft (5.294 m) higher.

REMARKS.--Records good. Flow regulated by Alum Creek Lake since August 1973. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--9 years (water years 1964-72), 115 ft³/s (3.257 m³/s), 5 years (water years 1974-78), 87.0 ft³/s (2.464 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,160 ft³/s (174 m³/s) Mar. 10, 1964, gage height, 13.95 ft (4.252 m), from graph based on gage readings, site and datum then in use; no flow at times 1963-65.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 5, 1963 reached a stage of 14.2 ft (4.33 m), from floodmarks, discharge, 6,460 ft³/s (183 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,600 ft³/s (45.3 m³/s) Apr. 1, gage height, 27.19 ft (8.288 m); minimum daily, 6.7 ft³/s (0.19 m³/s) Oct. 22-25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	7.5	11	43	32	14	1490	44	32	11	9.7	9.3
2	7.5	7.5	8.9	41	33	14	1510	44	32	11	9.8	9.3
3	7.0	7.5	9.0	41	30	14	1240	34	32	11	10	9.1
4	7.2	7.5	9.1	41	31	14	691	22	22	21	9.5	9.0
5	7.5	7.8	76	22	31	14	488	22	10	35	9.6	8.8
6	7.5	7.5	302	18	31	14	401	22	9.1	36	10	8.7
7	7.5	7.5	460	35	31	14	395	22	9.3	36	9.3	8.6
8	8.2	7.5	723	34	32	14	399	23	9.6	36	9.3	8.6
9	7.8	7.5	752	294	32	14	399	22	9.5	36	9.4	8.3
10	7.8	8.2	415	451	30	14	252	22	9.7	36	9.5	8.3
11	7.8	8.2	356	451	30	14	52	22	9.7	22	9.5	8.3
12	7.2	7.8	127	450	30	16	44	22	9.8	13	9.1	8.5
13	7.5	7.8	8.5	160	30	20	41	26	9.3	13	9.1	8.3
14	7.8	7.8	24	32	30	35	42	24	9.8	13	9.1	8.4
15	7.8	7.8	515	32	30	21	42	168	11	13	9.2	8.3
16	8.2	8.2	1110	32	30	20	40	287	9.2	12	9.1	8.5
17	8.2	8.2	1070	32	30	17	40	363	8.9	10	9.1	8.4
18	8.2	7.8	1230	32	30	14	40	485	9.4	10	9.1	8.2
19	8.2	7.8	971	32	29	90	133	427	54	11	9.2	7.8
20	8.2	7.8	695	32	29	168	187	348	157	10	9.5	8.1
21	7.0	9.8	461	32	25	324	376	347	182	11	13	7.6
22	6.7	8.5	199	32	14	452	470	150	175	10	10	8.0
23	6.7	8.3	126	32	13	457	470	73	103	11	9.5	7.9
24	6.7	8.5	125	32	13	463	467	357	7.3	10	9.0	8.0
25	6.7	8.5	125	31	13	428	242	481	8.7	9.8	9.0	8.3
26	7.0	8.5	338	41	13	27	110	482	12	9.7	8.7	8.5
27	7.2	8.5	370	35	14	22	109	356	11	10	10	8.7
28	7.2	8.5	74	35	14	20	80	125	11	9.9	9.1	8.4
29	7.2	8.5	41	34	---	19	43	31	11	9.9	9.3	8.5
30	7.5	12	41	34	---	591	44	31	11	9.9	12	8.5
31	7.5	---	316	32	---	1420	---	32	---	9.7	10	---
TOTAL	245.5	244.8	11088.5	2675	730	4778	10347	4914	995.3	506.9	297.7	253.2
MEAN	7.92	8.16	358	86.3	26.1	154	345	159	33.2	16.4	9.60	8.44
MAX	21	12	1230	451	33	1420	1510	485	182	36	13	9.3
MIN	6.7	7.5	8.5	18	13	14	40	22	7.3	9.7	8.7	7.6

CAL YR 1977 TOTAL 36628.7 MEAN 100 MAX 1280 MIN 2.8
WTR YR 1978 TOTAL 37075.9 MEAN 102 MAX 1510 MIN 6.7

03229000 ALUM CREEK AT COLUMBUS, OH

LOCATION.--Lat 39°56'42", long 82°56'28", in NW 1/4 sec. 24, T.5 N., R.22 W., Franklin County, Hydrologic Unit 05060001, on left bank 0.2 mi (0.3 km) downstream from Livingston Avenue bridge in Columbus, and 6 mi (10 km) upstream from mouth.

DRAINAGE AREA.--189 mi² (490 km²).

PERIOD OF RECORD.--July 1923 to December 1935, January 1938 to current year.

REVISED RECORDS.--WSP 758: 1933. WSP 1305: 1928(M). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 733.69 ft (223.629 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Alum Creek Lake 19 mi (31 km) upstream, since Aug. 1973. There was no pumpage from the Alum Creek well field this year. Water-quality data collected at this site 1960 to 1977. Sediment data collected 1960 to 1965.

AVERAGE DISCHARGE.--52 years, 167 ft³/s (4.729 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,400 ft³/s (748 m³/s) Jan. 22, 1959, gage height, 19.59 ft (5.971 m) (from high-water mark in well), from rating curve extended above 17,000 ft³/s (481 m³/s) on basis of contracted-opening measurement of peak flow; no flow Sept. 21-29, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,970 ft³/s (112 m³/s) Oct. 1, gage height, 8.48 ft (2.585 m); minimum daily, 12 ft³/s (0.34 m³/s) Aug. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1710	30	684	66	120	25	1530	67	49	23	16	67
2	350	31	175	60	100	25	1510	64	61	81	16	29
3	106	30	151	54	84	25	1440	64	59	103	46	21
4	56	51	109	50	76	26	897	84	46	38	26	20
5	40	44	874	48	68	26	597	92	36	33	18	19
6	92	33	521	44	66	26	627	61	25	44	165	18
7	42	81	526	61	64	26	743	49	49	44	98	17
8	155	33	588	897	60	26	498	75	130	44	29	16
9	198	27	1090	521	56	29	449	122	158	42	20	16
10	92	40	467	679	54	51	415	69	36	42	72	16
11	64	33	436	760	50	98	115	56	26	42	29	16
12	49	24	390	760	48	280	84	67	38	29	95	16
13	38	23	155	544	45	427	69	382	40	20	33	16
14	33	23	1900	100	42	2020	61	255	23	21	21	16
15	33	23	684	76	40	850	61	186	20	21	18	24
16	31	67	1390	68	38	432	59	549	20	31	24	31
17	30	146	1310	66	36	280	56	554	18	18	23	33
18	27	59	1330	64	34	146	138	711	44	16	15	17
19	27	34	1370	60	33	162	280	622	309	15	21	16
20	27	31	915	60	32	342	339	467	175	15	27	15
21	26	309	732	58	31	573	544	471	339	15	15	14
22	27	146	406	58	30	689	627	350	280	21	15	15
23	27	78	206	60	29	648	588	146	251	29	16	15
24	26	49	198	62	28	638	583	331	51	69	15	16
25	26	38	312	136	27	727	653	612	38	34	13	15
26	38	38	190	1100	27	1110	362	593	44	21	12	13
27	33	30	219	453	26	663	198	559	46	16	25	16
28	30	26	643	362	25	206	165	291	109	21	151	16
29	30	24	526	228	---	119	84	130	27	16	42	16
30	30	350	142	172	---	202	72	98	21	16	219	29
31	30	---	78	151	---	1430	---	72	---	16	331	---
TOTAL	3523	1951	18717	7880	1369	12327	13844	8249	2568	988	1666	604
MEAN	114	65.0	604	254	48.9	398	461	266	85.6	31.9	53.7	20.1
MAX	1710	350	1900	1100	120	2020	1530	711	339	103	331	67
MIN	26	23	78	44	25	25	56	49	18	15	12	13

CAL YR 1977 TOTAL 70939.5 MEAN 194 MAX 1900 MIN 7.0
WTR YR 1978 TOTAL 73686.0 MEAN 202 MAX 2020 MIN 12

03229500 BIG WALNUT CREEK AT REES, OH

LOCATION.--Lat 39°51'24", long 82°57'26", in NE 1/4 sec. 26, T.4 N., R.22 W., Franklin County, Hydrologic Unit 05060001, on right bank at downstream side of bridge on Reese Road, 0.5 mi (0.8 km) southwest of Rees, 4.2 mi (6.8 km) downstream from Alum Creek, and 10.5 mi (16.9 km) upstream from mouth.

DRAINAGE AREA.--544 mi² (1,409 km²).

PERIOD OF RECORD.--August 1921 to December 1935, October 1938 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1053: 1929, 1933(M), 1945. WSP 1305: 1923(M), 1925-26(M).

GAGE.--Water-stage recorder. Datum of gage is 698.20 ft (212.811 m) National Geodetic Vertical Datum of 1929. Aug. 18, 1921, to Oct. 23, 1927, nonrecording gage at site 0.3 mi (0.5 km) upstream at datum 2.00 ft (0.610 m) higher prior to Oct. 1, 1924, at present datum thereafter.

REMARKS.--Records good except those for winter periods and no gage height, which are fair. Flow regulated by Hoover Reservoir 26 mi (42 km) upstream (see station 03228400) and Alum Creek Lake 30 mi (48 km) upstream (see station 03228804) since August 1973. Beginning June 15, 1956, diversion at Morse Road Treatment Plant, 21 mi (34 km) upstream from station, for municipal water supply for the city of Columbus. For statement on pumpage from Alum Creek basin into municipal supply system of the city of Columbus, see REMARKS for station 03229000. Water-quality data collected at this site 1964 to 1977.

AVERAGE DISCHARGE.--54 years, 507 ft³/s (14.36 m³/s) (adjusted for diversion).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 59,800 ft³/s (1,690 m³/s) Jan. 22, 1959, gage height, 22.03 ft (6.715 m) (from high-water mark in well), from rating curve extended above 13,000 ft³/s (368 m³/s) on basis of contracted-opening measurement of peak flow; minimum, 5 ft³/s (0.14 m³/s) Sept. 4, 5, 10-12, 1925; minimum daily since 1956, 9.4 ft³/s (0.266 m³/s) Sept. 13, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 25, 1913 reached a stage of 20.5 ft (6.25 m), present datum, at site 0.3 mi (0.5 km) upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,430 ft³/s (210 m³/s) Mar. 15, gage height, 11.62 ft (3.542 m); minimum daily, 39 ft³/s (1.10 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	591	125	2490	170	280	100	1640	324	218	93	67	798
2	1030	136	812	160	260	100	1550	258	176	162	58	286
3	439	140	544	150	250	100	1550	189	167	364	57	175
4	221	140	563	140	240	100	1190	216	154	178	101	139
5	148	169	1730	140	230	100	1020	476	148	123	57	119
6	273	138	1970	140	230	100	999	306	133	138	369	103
7	211	247	910	190	230	100	2300	231	194	125	478	87
8	333	171	729	2470	220	110	1400	245	890	109	161	124
9	715	162	1140	2300	220	110	846	941	1070	101	90	76
10	439	144	697	1500	210	150	689	408	418	99	184	64
11	231	158	595	1050	200	250	461	261	256	96	142	62
12	165	122	524	780	190	817	429	245	201	91	279	60
13	146	94	327	610	180	1350	336	1240	237	67	251	62
14	129	101	3940	470	180	5030	303	1360	162	63	155	82
15	129	93	2640	400	170	5440	247	1150	136	75	169	84
16	116	125	1670	340	150	3960	223	978	125	116	112	75
17	113	616	1950	300	140	2890	213	1190	114	70	120	126
18	109	330	1740	280	140	941	315	1600	102	64	80	79
19	102	182	1670	260	130	941	936	946	774	57	81	73
20	106	154	1200	250	120	1370	1130	742	436	52	161	56
21	104	711	1130	240	110	2210	1880	715	443	48	86	49
22	90	663	733	220	110	3230	1930	637	715	51	70	46
23	93	318	465	210	105	1750	1080	422	502	63	73	45
24	96	221	502	230	105	1610	931	587	273	192	61	49
25	96	185	671	470	100	1400	1000	1140	129	173	57	48
26	127	176	865	950	100	4050	1340	994	258	146	53	45
27	102	144	401	2000	100	5000	706	779	144	90	76	42
28	109	125	300	1400	100	2500	472	528	261	74	624	41
29	129	116	250	900	---	999	336	287	146	70	455	39
30	134	641	210	560	---	645	349	381	116	63	665	43
31	131	---	190	330	---	1450	---	391	---	76	1940	---
TOTAL	6957	6847	33558	19610	4800	48903	27801	20167	9098	3289	7332	3178
MEAN	224	228	1083	633	171	1578	927	651	303	106	237	106
MAX	1030	711	3940	2470	280	5440	2300	1600	1070	364	1940	798
MIN	90	93	190	140	100	100	213	189	102	48	53	39
CFSM	.41	.42	1.99	1.16	.31	2.90	1.70	1.20	.56	.20	.44	.20
IN.	.48	.47	2.29	1.34	.33	3.34	1.90	1.38	.62	.22	.50	.22
(+)	112	108	117	120	128	127	125	129	136	142	126	126

CAL YR 1977 TOTAL 131081 MEAN 359 MAX 3940 MIN 29 CFSM .66 IN 8.96
WTR YR 1978 TOTAL 191540 MEAN 525 MAX 5440 MIN 39 CFSM .97 IN 13.10
(+) Diversion, equivalent in cubic feet per second, for city of Columbus.

Note: No gage height record Jan. 8 to Feb. 9.

03229600 SCIOTO RIVER BELOW SHADEVILLE, OH

LOCATION.--Lat 39°47'37", long 83°00'40", Pickaway County, Hydrologic Unit 05060001, on left bank at Picway Plant of Columbus and Southern Ohio Electric Company, 0.4 mi (0.6 km) downstream from Big Walnut Creek, and 3.2 mi (5.1 km) downstream from Shadeville.

DRAINAGE AREA.--2,266 mi² (5,869 km²).

PERIOD OF RECORD.--March 1965 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: March 1965 to current year.
pH: March 1965 to current year.
WATER TEMPERATURES: March 1965 to current year.
DISSOLVED OXYGEN: March 1965 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. No discharge records available.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,270 micromhos Feb. 1, 1971; minimum, 161 micromhos Nov. 28, 1973.
pH: Maximum, 9.5 units June 30, 1972; minimum, 5.1 units Mar. 16, 1972.
WATER TEMPERATURES: Maximum, 33.0°C Aug. 16, 1965; minimum, 0.0°C on many days during winter periods.
DISSOLVED OXYGEN: Maximum, 15.0 mg/L or higher Feb. 7-11, 1969; minimum, 0.0 mg/L on many days during 1965-68, 1971, 1973-75.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,230 micromhos Mar. 11, 12; minimum, 228 micromhos Mar. 15.
pH: Maximum, 8.2 units Jan. 9, Dec. 8-10, 12, Apr. 30, May 1; minimum, 7.0 units Mar. 15, July 24, Aug. 15, 16.
WATER TEMPERATURES: Maximum, 29.0° July 22; minimum, 0.0°C Dec. 29.
DISSOLVED OXYGEN: Maximum, 14.6 mg/L Jan. 10-12; minimum, 0.1 mg/L July 23.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	965	393	872	824	795	440	---	---	---	---	951	933
2	407	285	861	833	587	470	---	---	---	---	1010	873
3	566	422	882	852	656	593	---	---	---	---	1010	813
4	644	578	902	875	651	600	---	---	---	---	1130	975
5	729	645	906	789	660	417	837	824	---	---	1120	1020
6	779	653	888	728	401	366	873	828	---	---	1050	1020
7	656	641	---	---	---	---	888	725	681	651	1080	1040
8	767	644	---	---	653	620	791	395	717	669	1090	1050
9	644	579	776	750	641	600	467	374	735	705	1130	1050
10	614	576	852	770	737	651	560	465	771	735	1220	1110
11	678	617	854	812	753	720	591	561	783	756	1230	1180
12	753	669	839	791	756	710	626	581	804	777	1230	981
13	761	738	885	840	887	743	644	620	810	783	963	630
14	780	750	899	863	1010	300	---	---	825	798	618	276
15	789	765	882	848	552	308	---	---	867	819	399	228
16	815	788	924	882	605	501	---	---	867	843	402	360
17	809	780	941	576	575	504	---	---	900	861	384	375
18	837	792	692	614	516	482	---	---	924	885	396	336
19	890	839	791	695	507	461	---	---	918	882	453	381
20	---	---	798	768	522	485	---	---	909	879	444	387
21	914	896	806	524	537	503	---	---	903	888	405	360
22	920	897	615	503	549	533	---	---	903	876	375	351
23	1000	792	699	630	555	539	---	---	909	885	426	369
24	825	789	713	680	584	558	---	---	903	888	444	399
25	839	827	741	702	615	582	---	---	939	906	450	414
26	870	833	767	744	636	611	---	---	945	924	480	327
27	882	864	773	750	660	626	---	---	927	912	336	312
28	917	891	801	758	669	555	---	---	936	912	393	342
29	909	878	950	794	633	581	---	---	---	---	453	387
30	924	891	918	728	---	---	---	---	---	---	474	450
31	893	857	---	---	---	---	---	---	---	---	549	456
MONTH	1000	285	950	503	1010	300	888	374	945	651	1230	228

03229600 SCIOTO RIVER BELOW SHADEVILLE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	480	456	627	612	639	561	756	708	813	780	507	342
2	528	477	666	624	675	633	750	609	828	777	606	519
3	486	447	681	666	675	660	639	615	864	822	657	609
4	510	450	705	681	672	657	672	612	864	795	672	654
5	528	507	690	621	687	672	687	669	831	801	690	666
6	528	477	693	621	711	678	693	669	825	588	723	690
7	---	---	702	684	732	696	726	693	648	480	756	726
8	---	---	708	699	681	381	756	726	603	552	753	720
9	---	---	696	447	531	477	777	747	714	609	801	753
10	567	558	648	522	609	507	777	771	741	663	795	738
11	597	567	702	654	642	606	792	762	702	657	768	741
12	630	597	720	699	681	630	795	780	786	582	777	768
13	642	624	720	444	696	648	831	792	630	555	777	753
14	651	639	438	390	723	666	843	816	645	546	780	771
15	660	648	480	432	768	720	843	822	687	636	816	774
16	660	651	549	480	783	741	840	828	783	684	810	780
17	663	651	540	480	756	744	837	819	---	---	819	762
18	681	645	510	438	768	732	834	819	---	---	771	750
19	645	504	537	459	717	495	873	828	---	---	774	762
20	543	495	567	534	609	546	882	861	---	---	813	768
21	513	438	561	546	645	585	882	870	---	---	864	813
22	468	414	576	552	639	567	918	888	---	---	900	864
23	492	471	636	570	609	546	912	849	---	---	861	846
24	498	483	636	588	663	603	867	753	---	---	873	846
25	501	492	576	465	711	660	750	702	---	---	876	837
26	492	441	519	468	753	627	726	690	---	---	840	822
27	510	450	525	498	672	630	792	726	---	---	858	828
28	573	507	522	492	729	621	837	786	---	---	909	861
29	615	573	555	522	702	642	822	801	558	453	933	912
30	615	606	588	537	753	705	813	798	591	459	918	882
31	---	---	591	561	---	---	819	798	453	324	---	---
MONTH	681	414	720	390	783	381	918	609	864	324	933	342
YEAR	1230	228										

03229600 SCIOTO RIVER BELOW SHADEVILLE, OH--Continued

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.1	7.6	7.6	7.5	7.8	7.3	---	---	---	---	7.6	7.4
2	7.9	7.7	7.5	7.5	7.7	7.5	---	---	---	---	7.5	7.3
3	8.0	7.9	7.5	7.4	7.8	7.7	---	---	---	---	7.7	7.4
4	8.0	7.9	7.4	7.4	7.8	7.7	---	---	---	---	7.8	7.6
5	8.0	7.8	7.5	7.4	7.8	7.4	7.8	7.8	---	---	7.8	7.6
6	8.0	7.8	7.5	7.4	7.6	7.4	7.8	7.7	---	---	7.8	7.6
7	8.0	7.9	---	---	---	---	7.8	7.6	7.8	7.7	7.6	7.4
8	7.9	7.7	---	---	8.2	8.0	7.9	7.5	7.7	7.3	7.6	7.4
9	8.0	7.9	7.4	7.3	8.2	8.0	8.2	7.8	7.4	7.2	7.6	7.5
10	8.1	8.0	7.7	7.4	8.2	8.1	8.1	8.0	7.4	7.3	7.8	7.4
11	8.1	7.9	7.9	7.7	8.1	8.0	8.0	8.0	7.5	7.3	7.6	7.4
12	8.0	7.8	7.8	7.6	8.2	7.7	8.0	7.9	7.4	7.2	7.5	7.1
13	7.9	7.7	7.8	7.6	8.0	7.4	8.0	7.8	7.4	7.2	7.3	7.1
14	7.6	7.4	7.8	7.5	7.8	7.6	---	---	7.5	7.3	7.2	7.1
15	7.5	7.3	7.7	7.6	8.0	7.6	---	---	7.5	7.3	7.5	7.0
16	7.6	7.5	7.6	7.4	8.0	7.8	---	---	7.3	7.2	7.5	7.4
17	7.7	7.5	7.7	7.4	8.1	7.9	---	---	7.3	7.2	7.6	7.5
18	7.5	7.4	7.5	7.4	8.0	7.8	---	---	7.5	7.3	7.5	7.4
19	7.5	7.4	7.6	7.4	8.1	7.7	---	---	7.4	7.2	7.5	7.4
20	---	---	7.6	7.3	8.0	7.8	---	---	7.4	7.2	7.6	7.4
21	7.4	7.3	7.5	7.1	8.0	7.8	---	---	7.4	7.2	7.6	7.4
22	7.4	7.3	7.5	7.4	8.1	8.0	---	---	7.4	7.2	7.7	7.4
23	7.5	7.4	7.6	7.3	8.1	7.9	---	---	7.6	7.2	7.8	7.6
24	7.5	7.4	7.4	7.3	8.1	8.0	---	---	7.6	7.5	7.7	7.7
25	7.4	7.3	7.5	7.2	8.0	7.6	---	---	7.5	7.3	7.7	7.6
26	7.3	7.2	7.7	7.5	8.0	7.5	---	---	7.7	7.5	7.7	7.6
27	7.3	7.3	7.8	7.6	7.9	7.6	---	---	7.7	7.5	7.6	7.6
28	7.5	7.4	7.8	7.6	7.9	7.7	---	---	7.6	7.4	7.7	7.4
29	7.6	7.5	7.7	7.5	7.9	7.3	---	---	---	---	7.7	7.4
30	7.7	7.5	7.8	7.6	---	---	---	---	---	---	7.8	7.6
31	7.6	7.5	---	---	---	---	---	---	---	---	7.9	7.6
MONTH	8.1	7.2	7.9	7.1	8.2	7.3	8.2	7.5	7.8	7.2	7.9	7.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.6	7.6	8.2	7.9	7.6	7.5	7.7	7.6	7.6	7.6	7.5	7.4
2	7.7	7.6	8.1	7.9	7.6	7.5	7.6	7.5	7.6	7.5	7.6	7.5
3	7.7	7.6	7.9	7.8	7.7	7.6	7.7	7.5	7.5	7.4	7.5	7.5
4	7.6	7.6	7.8	7.7	7.8	7.7	7.7	7.6	7.7	7.4	7.6	7.5
5	7.9	7.7	7.9	7.7	7.8	7.7	7.6	7.6	7.6	7.5	7.6	7.6
6	7.9	7.7	7.8	7.5	7.7	7.7	7.6	7.6	7.6	7.4	7.7	7.6
7	7.8	7.7	7.8	7.7	7.7	7.6	7.7	7.6	7.6	7.3	7.7	7.5
8	7.9	7.7	7.7	7.6	7.8	7.5	7.7	7.6	7.4	7.2	7.8	7.5
9	8.1	7.9	7.8	7.6	7.7	7.5	7.8	7.6	7.3	7.2	7.7	7.5
10	8.0	7.7	7.7	7.6	7.5	7.5	7.8	7.7	7.3	7.2	7.8	7.5
11	7.7	7.6	7.8	7.6	7.6	7.5	7.8	7.7	7.4	7.3	7.8	7.6
12	7.8	7.7	7.7	7.6	7.6	7.6	7.9	7.8	7.4	7.1	7.7	7.5
13	7.8	7.7	7.9	7.7	7.8	7.6	7.8	7.7	7.3	7.1	7.6	7.5
14	7.9	7.7	7.8	7.7	7.7	7.6	7.7	7.6	7.1	7.1	7.6	7.6
15	7.9	7.8	7.9	7.8	7.6	7.6	7.8	7.6	7.1	7.0	7.7	7.6
16	7.9	7.7	7.8	7.7	7.6	7.6	8.0	7.6	7.4	7.0	7.7	7.5
17	8.1	7.8	7.8	7.7	7.6	7.6	8.0	7.8	---	---	7.8	7.5
18	7.9	7.7	7.9	7.7	7.6	7.5	7.8	7.7	---	---	7.7	7.6
19	7.9	7.7	7.9	7.7	8.0	7.5	7.8	7.6	---	---	7.6	7.5
20	7.8	7.7	8.0	7.7	7.7	7.6	7.6	7.6	---	---	7.6	7.5
21	7.9	7.8	8.1	7.9	7.6	7.5	7.6	7.3	---	---	7.6	7.5
22	8.0	7.9	8.1	7.9	7.7	7.6	7.4	7.3	---	---	7.7	7.5
23	7.9	7.9	8.0	7.9	7.7	7.6	7.4	7.1	---	---	7.8	7.6
24	7.9	7.8	8.0	7.8	7.6	7.5	7.5	7.0	---	---	7.9	7.6
25	7.9	7.8	7.9	7.8	7.6	7.6	7.5	7.2	---	---	7.9	7.7
26	7.8	7.7	8.0	7.8	7.7	7.5	7.5	7.3	---	---	7.9	7.6
27	7.9	7.7	8.0	7.8	7.6	7.3	7.5	7.3	---	---	7.8	7.6
28	8.1	7.7	7.8	7.7	7.6	7.3	7.6	7.3	---	---	7.8	7.6
29	8.0	7.8	7.7	7.6	7.7	7.6	7.6	7.3	7.4	7.2	7.9	7.6
30	8.2	7.8	7.7	7.6	7.8	7.5	7.6	7.4	7.4	7.2	7.8	7.6
31	---	---	7.7	7.6	---	---	7.6	7.5	7.4	7.4	---	---
MONTH	8.2	7.6	8.2	7.5	8.0	7.3	8.0	7.0	7.7	7.0	7.9	7.4
YEAR	8.2	7.0										

03229600 SCIOTO RIVER BELOW SHADEVILLE, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	21.0	18.5	15.0	14.0	7.0	4.5	---	---	---	---	5.0	3.5
2	18.5	17.5	16.0	14.0	7.0	6.0	---	---	---	---	4.0	3.0
3	17.5	16.0	16.5	15.5	6.0	5.5	---	---	---	---	4.5	3.0
4	17.0	15.5	17.5	16.5	5.5	5.0	---	---	---	---	4.5	3.0
5	17.0	15.5	18.5	16.5	5.0	3.5	3.5	3.0	---	---	4.0	2.5
6	18.0	16.5	18.0	16.5	3.5	3.0	4.0	3.0	---	---	6.0	3.0
7	16.0	15.0	---	---	---	---	4.5	4.0	2.0	1.0	5.5	4.0
8	16.5	15.5	---	---	1.5	1.0	3.5	1.5	2.5	1.5	4.0	3.5
9	15.0	13.5	18.0	17.5	1.0	.5	1.5	.5	2.5	1.0	5.5	3.5
10	14.5	13.0	17.5	13.5	1.0	.5	.5	.5	2.5	1.5	5.5	3.5
11	14.0	13.0	13.5	10.5	1.5	1.0	.5	.5	2.5	1.5	5.0	3.5
12	13.5	12.5	10.5	9.5	2.0	1.5	1.0	.5	3.0	2.0	5.0	1.5
13	13.5	13.0	9.5	8.0	4.0	2.0	1.0	1.0	2.5	2.0	2.5	1.0
14	14.0	12.0	9.0	8.5	2.0	1.5	---	---	3.0	2.0	1.5	.5
15	14.5	12.0	10.5	8.5	3.0	2.0	---	---	2.5	1.5	2.0	.5
16	13.5	12.0	11.5	10.5	3.0	2.5	---	---	3.0	2.5	2.5	2.0
17	12.5	10.5	11.5	9.5	3.0	2.5	---	---	4.0	2.5	2.5	2.0
18	13.5	11.5	9.5	8.5	3.5	2.5	---	---	3.5	2.0	2.5	1.5
19	14.0	12.5	9.0	8.0	4.0	3.0	---	---	3.0	1.5	3.5	2.0
20	---	---	10.0	8.5	4.0	3.5	---	---	3.0	2.0	4.5	2.5
21	15.0	13.0	11.0	8.0	3.5	3.5	---	---	3.5	2.5	5.0	4.0
22	15.5	13.5	9.0	8.0	3.5	3.0	---	---	3.5	2.5	4.0	3.0
23	15.5	14.0	9.5	8.5	3.0	2.5	---	---	3.5	2.0	5.0	4.0
24	15.5	13.0	9.5	8.5	2.5	2.0	---	---	4.0	3.0	4.5	3.5
25	15.5	14.5	8.5	7.5	3.0	2.0	---	---	4.5	3.5	4.0	3.5
26	16.5	15.5	7.5	5.5	4.0	2.5	---	---	4.5	3.0	4.5	4.0
27	16.0	15.5	5.5	4.0	4.0	2.0	---	---	4.5	3.0	4.0	3.5
28	16.5	15.0	6.0	4.0	2.0	1.0	---	---	4.5	3.5	5.0	3.0
29	15.5	14.0	6.5	5.0	1.0	.0	---	---	---	---	7.0	5.0
30	15.0	13.5	7.0	4.5	---	---	---	---	---	---	7.0	5.5
31	14.5	13.5	---	---	---	---	---	---	---	---	8.5	6.0
MONTH	21.0	10.5	18.5	4.0	7.0	.0	4.5	.5	4.5	1.0	8.5	.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.0	7.0	15.0	12.5	24.5	22.0	27.0	25.0	25.5	22.5	21.5	19.5
2	7.5	5.5	15.5	12.5	24.0	22.5	25.0	23.5	26.5	23.5	23.0	20.0
3	6.5	5.5	16.0	13.0	24.0	22.5	24.0	22.5	26.0	24.5	23.5	20.5
4	8.5	6.5	15.0	13.0	23.0	21.0	23.0	22.0	26.0	23.0	24.0	21.5
5	10.5	8.5	13.0	12.0	22.5	20.5	23.5	21.5	24.5	23.0	24.0	21.0
6	10.0	9.5	12.5	11.0	22.5	20.5	25.0	22.0	23.5	22.5	24.5	21.5
7	10.5	9.0	12.5	12.0	22.5	21.5	26.0	23.5	24.0	22.5	25.5	22.5
8	10.5	9.5	13.5	12.5	22.0	21.5	26.5	24.5	25.0	22.0	25.5	23.0
9	10.5	9.5	15.5	13.0	22.0	20.5	26.5	24.5	26.0	23.0	26.5	23.5
10	12.0	10.0	15.5	14.0	23.5	20.5	26.5	25.0	25.5	24.0	27.0	24.5
11	13.0	12.0	17.0	14.0	24.0	21.0	25.5	23.0	24.5	23.5	26.0	24.5
12	14.5	11.5	17.0	16.0	24.5	22.5	25.5	22.0	24.5	23.5	25.0	24.0
13	15.0	12.5	16.5	15.5	23.0	20.0	24.5	22.5	25.5	23.5	25.0	23.5
14	14.0	12.0	15.5	13.0	21.5	19.0	26.5	23.5	26.0	24.0	24.5	23.5
15	14.5	12.0	13.0	12.5	21.0	19.5	26.5	24.0	26.5	24.0	25.0	23.0
16	13.5	12.0	13.5	12.0	22.5	20.5	27.5	24.0	26.0	24.5	24.0	23.0
17	14.5	11.5	15.0	13.0	24.0	21.5	26.5	23.0	---	---	24.0	23.0
18	13.5	12.0	16.5	14.5	25.5	22.5	26.0	23.0	---	---	25.5	23.0
19	13.0	11.5	19.0	15.5	25.0	23.0	27.0	23.5	---	---	26.0	24.0
20	12.0	10.0	20.0	17.5	25.5	23.0	28.0	24.5	---	---	26.5	24.5
21	10.0	8.5	19.0	18.0	25.0	23.5	28.0	25.5	---	---	26.5	24.5
22	10.0	8.0	17.5	16.0	24.0	22.0	29.0	26.0	---	---	25.0	22.0
23	10.5	10.0	18.0	17.0	24.0	21.5	28.5	26.0	---	---	22.5	20.0
24	11.0	9.5	18.0	17.5	25.0	22.0	26.0	25.5	---	---	23.0	21.0
25	11.0	10.5	18.0	17.0	25.0	23.0	25.5	25.0	---	---	22.5	20.5
26	11.0	10.0	20.0	18.0	25.5	23.5	27.5	24.0	---	---	21.5	19.0
27	13.0	10.5	20.0	19.0	28.0	24.5	27.0	25.0	---	---	21.0	19.0
28	14.5	11.5	22.0	19.0	28.5	25.5	27.5	24.0	---	---	21.0	19.0
29	15.0	12.5	22.5	20.5	28.5	26.0	25.5	24.0	25.0	24.5	20.5	18.0
30	16.0	13.5	23.0	21.0	28.0	25.5	25.0	23.5	24.5	22.5	20.0	18.5
31	---	---	24.5	21.5	---	---	24.5	22.5	22.0	20.0	---	---
MONTH	16.0	5.5	24.5	11.0	28.5	19.0	29.0	21.5	26.5	20.0	27.0	18.0
YEAR	29.0	.0										

03229600 SCIOTO RIVER BELOW SHADEVILLE, OH--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCTOBER MAX	OCTOBER MIN	NOVEMBER MAX	NOVEMBER MIN	DECEMBER MAX	DECEMBER MIN	JANUARY MAX	JANUARY MIN	FEBRUARY MAX	FEBRUARY MIN	MARCH MAX	MARCH MIN
1	6.1	2.1	8.1	6.8	10.7	9.8	---	---	---	---	11.9	10.9
2	6.4	4.7	8.0	6.7	10.2	9.8	---	---	---	---	12.1	10.8
3	7.0	6.8	7.5	6.4	10.6	10.2	---	---	---	---	11.9	11.0
4	7.0	6.7	6.7	5.8	10.8	10.4	---	---	---	---	12.4	11.0
5	6.7	6.3	7.0	5.6	10.7	10.5	12.7	12.4	---	---	12.6	11.0
6	6.8	6.0	6.6	6.0	11.0	10.7	12.7	12.3	---	---	12.5	11.2
7	7.2	6.4	---	---	---	---	12.5	12.1	12.7	12.6	12.8	11.0
8	6.7	5.2	---	---	12.7	12.6	13.0	12.2	12.8	12.5	11.8	10.5
9	6.9	6.3	6.3	6.0	12.9	12.6	14.1	13.1	12.9	12.6	11.8	10.3
10	7.7	6.9	6.2	5.7	13.0	12.9	14.6	14.1	12.7	12.5	12.8	10.3
11	7.6	6.6	8.0	6.2	13.1	12.7	14.6	14.5	12.6	12.4	12.1	9.8
12	7.2	6.6	8.9	7.7	12.7	12.2	14.6	14.2	12.6	12.2	11.2	9.8
13	6.8	6.5	9.2	8.1	12.2	11.1	14.3	14.0	12.4	12.1	11.8	11.2
14	7.1	6.6	9.0	8.1	11.9	11.4	---	---	12.3	12.0	12.8	11.6
15	7.0	6.6	8.9	8.2	11.9	11.6	---	---	12.4	12.0	13.3	12.8
16	6.7	6.5	8.1	6.7	12.1	11.7	---	---	12.5	12.0	13.3	13.1
17	7.2	6.7	9.3	6.5	12.2	11.9	---	---	12.3	11.7	13.5	13.1
18	6.9	6.5	8.3	7.8	12.0	11.8	---	---	12.3	11.7	13.7	13.3
19	6.5	6.0	9.0	8.3	12.0	11.6	---	---	12.5	11.7	13.4	13.0
20	---	---	9.1	8.5	12.1	11.7	---	---	12.2	11.6	13.2	12.9
21	6.9	6.1	9.8	7.1	12.1	11.9	---	---	12.2	11.4	13.1	12.3
22	6.5	6.2	9.3	9.1	12.6	12.0	---	---	12.2	11.3	13.2	12.6
23	7.4	5.4	9.4	8.5	12.8	12.5	---	---	12.1	11.2	13.1	12.4
24	7.6	7.0	8.8	8.5	12.9	12.8	---	---	11.8	11.2	13.0	12.7
25	6.9	6.2	8.8	8.4	12.8	12.4	---	---	11.7	10.9	13.1	12.8
26	6.2	5.3	9.9	8.8	12.4	12.0	---	---	12.1	10.9	12.7	12.1
27	5.8	5.3	10.5	9.7	12.2	12.0	---	---	12.2	11.7	12.8	12.3
28	7.0	5.9	10.8	10.1	13.4	12.1	---	---	12.1	11.4	13.0	12.6
29	7.8	6.5	10.5	9.6	13.4	13.0	---	---	---	---	12.6	12.0
30	8.1	6.5	10.8	9.6	---	---	---	---	---	---	12.4	12.0
31	8.1	6.9	---	---	---	---	---	---	---	---	12.4	11.6
MONTH	8.1	2.1	10.8	5.6	13.4	9.8	14.6	12.1	12.9	10.9	13.7	9.8

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1	12.2	11.9	11.2	9.3	5.2	4.5	5.5	3.9	5.5	4.2	6.3	5.4
2	12.4	11.8	10.5	9.2	4.9	4.5	4.3	3.7	5.9	3.8	5.7	5.3
3	12.4	12.2	10.2	9.0	5.2	4.7	4.3	3.1	5.4	4.1	5.6	5.2
4	12.2	11.3	9.1	8.4	5.8	5.3	4.4	3.7	7.0	4.3	5.9	5.1
5	11.3	10.7	8.6	8.1	6.2	5.4	4.5	4.0	5.8	4.7	6.5	5.5
6	10.8	10.3	9.0	8.1	5.9	5.1	4.9	4.3	5.3	3.5	7.4	5.9
7	11.0	10.3	9.5	8.7	5.0	4.5	5.0	4.4	4.6	3.7	7.1	5.6
8	10.9	10.6	9.3	8.4	5.3	3.8	4.9	4.2	---	---	7.8	5.4
9	10.8	10.6	8.8	7.4	5.1	3.9	5.5	4.2	---	---	7.4	5.2
10	10.9	10.3	8.1	7.6	4.8	3.8	5.8	4.3	---	---	8.0	5.1
11	10.2	9.5	8.8	7.7	4.3	3.9	6.2	4.6	---	---	7.8	5.0
12	9.7	9.3	8.4	7.7	4.6	4.0	6.9	4.7	---	---	6.8	5.3
13	9.9	9.1	8.3	7.3	4.6	3.7	6.1	4.8	---	---	6.3	4.8
14	10.3	9.4	8.5	7.4	4.9	4.0	5.9	4.3	---	---	5.6	4.8
15	10.5	9.5	9.2	8.6	4.8	4.4	6.5	4.2	---	---	6.3	4.7
16	10.8	9.5	9.1	8.3	4.8	4.4	7.4	4.2	---	---	6.3	5.0
17	11.4	9.8	8.4	8.0	4.8	4.4	6.8	4.7	---	---	6.9	4.8
18	10.1	9.5	8.7	7.9	5.1	4.2	6.5	4.5	---	---	6.5	4.6
19	9.7	8.4	8.4	7.9	6.0	3.6	6.4	4.4	---	---	6.5	4.7
20	10.0	8.9	8.3	7.6	4.9	4.5	5.7	3.9	---	---	6.2	4.4
21	10.9	10.1	8.2	7.2	4.8	4.5	5.4	3.6	---	---	5.8	4.2
22	11.2	10.9	8.4	7.8	5.4	4.7	5.0	3.2	---	---	5.5	4.3
23	11.0	10.8	8.3	7.1	5.4	4.9	4.6	.1	---	---	6.3	4.3
24	11.3	10.8	7.6	6.4	5.1	4.5	3.3	.2	---	---	6.4	3.2
25	10.8	10.2	7.6	7.2	5.0	4.2	3.9	1.3	---	---	6.6	5.0
26	10.3	10.0	7.9	7.5	5.3	3.7	4.7	1.1	---	---	6.7	3.5
27	10.4	10.0	7.8	7.3	4.6	3.8	4.2	.7	---	---	6.8	3.8
28	11.1	9.9	7.2	6.2	4.9	2.1	4.7	1.0	---	---	5.7	2.6
29	11.1	9.4	---	---	5.6	4.4	4.6	.6	5.3	4.5	6.8	1.8
30	11.4	9.1	---	---	6.4	3.9	4.5	2.2	5.1	3.3	6.8	1.8
31	---	---	5.5	5.0	---	---	5.3	3.7	6.2	5.2	---	---
MONTH	12.4	8.4	11.2	5.0	6.4	2.1	7.4	.1	7.0	3.3	8.0	1.8
YEAR	14.6	.1										

03230500 BIG DARBY CREEK AT DARBYVILLE, OH

LOCATION.--Lat 39°42'02", long 83°06'37", Pickaway County, Hydrologic Unit 05060001, on right bank on downstream side of bridge on State Highway 316, 0.4 mi (0.6 km) northeast of Darbyville, 0.4 mi (0.6 km) upstream from Lizzard Run, and 3 mi (5 km) downstream from Greenbrier Creek.

DRAINAGE AREA.--534 mi² (1,383 km²).

PERIOD OF RECORD.--October 1921 to December 1935, January 1938 to current year. Prior to October 1959, published as Darby Creek at Darbyville.

REVISED RECORDS.--WSP 1083: 1922(M), 1924(M), 1927(M), 1933(M), 1938(M). WSP 1305: 1928-31(M), 1934(M), 1945(M). WSP 1505: 1932(M). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 713.69 ft (217.533 m) National Geodetic Vertical Datum of 1929. Prior to Mar. 17, 1940, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Water-quality data collected at this site 1964 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--54 years, 443 ft³/s (12.55 m³/s), 11.27 in/yr 286 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 49,000 ft³/s (1,390 m³/s) Jan. 22, 1959, gage height, 17.94 ft (5.468 m) from rating curve extended above 22,000 ft³/s (623 m³/s) on basis of contracted-opening measurement of peak flow; minimum observed, 1.4 ft³/s (0.040 m³/s) Sept. 17, 1932.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,500 ft³/s (127 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 16	1200	8140	231	11.60	3.536	Mar. 23	0330	5250	149	9.71	2.960
Mar. 17	0400	*8680	246	*11.89	3.624	Mar. 27	1830	5660	160	10.08	3.072

Minimum discharge, 25 ft³/s (0.71 m³/s) Sept. 27-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	92	1440	270	305	185	1130	430	372	183	52	194
2	848	90	2900	255	285	183	933	372	285	222	49	115
3	1260	89	1850	240	275	182	754	315	265	409	48	108
4	614	90	1220	227	260	180	721	309	237	489	48	83
5	375	91	1780	215	250	180	704	333	222	455	48	66
6	265	91	2680	215	242	180	645	312	212	312	101	55
7	218	93	2500	253	235	190	1360	280	212	244	147	51
8	202	101	1550	1470	230	180	1640	273	392	206	121	45
9	280	112	940	2640	225	185	952	430	382	183	85	39
10	462	126	1150	2130	218	188	717	423	372	157	89	36
11	423	126	760	1690	215	195	614	324	268	142	83	33
12	306	123	500	766	210	375	531	285	226	126	87	31
13	237	114	340	600	205	1500	470	504	214	115	115	31
14	198	107	2810	505	205	3670	395	1320	198	110	74	31
15	174	103	5500	440	200	6720	343	2180	188	104	60	31
16	157	103	7660	395	199	7910	309	1510	176	96	55	31
17	143	134	4360	355	198	7890	290	1530	167	91	58	31
18	131	164	2910	330	195	5130	297	1230	158	85	60	31
19	123	164	2270	300	195	3710	883	857	192	82	58	31
20	118	160	1710	285	192	3370	1700	661	275	74	55	31
21	112	179	1440	265	190	3950	1560	551	324	68	52	30
22	107	292	1100	255	190	4870	1320	477	292	63	46	30
23	102	309	787	240	190	4740	975	426	282	55	43	29
24	100	256	649	250	188	3740	779	426	216	61	37	28
25	98	216	717	603	187	2880	758	915	188	65	34	27
26	98	198	1430	1480	186	4110	1350	696	174	82	32	27
27	96	179	813	1820	186	5460	1200	489	162	74	32	25
28	99	164	563	1100	186	4620	783	392	150	65	33	25
29	98	150	440	640	---	2590	603	346	210	60	40	25
30	95	190	360	410	---	1820	504	423	220	58	46	27
31	93	---	300	330	---	1360	---	547	---	55	210	---
TOTAL	7677	4406	55429	20974	6042	82433	25220	19566	7231	4591	2098	1377
MEAN	248	147	1788	677	216	2659	841	631	241	148	67.7	45.9
MAX	1260	309	7660	2640	305	7910	1700	2180	392	489	210	194
MIN	45	89	300	215	186	180	290	273	150	55	32	25
CFSM	.46	.28	3.35	1.27	.40	4.98	1.58	1.18	.45	.28	.13	.09
IN.	.53	.31	3.86	1.46	.42	5.74	1.76	1.36	.50	.32	.15	.10

CAL YR 1977 TOTAL 150607 MEAN 413 MAX 7660 MIN 31 CFSM .77 IN 10.49
WTR YR 1978 TOTAL 237044 MEAN 649 MAX 7910 MIN 25 CFSM 1.22 IN 16.51

03230700 SCIOTO RIVER AT CIRCLEVILLE, OH

LOCATION.--Lat 39°36'05", long 82°57'19", in SW 1/4 sec. 19, T.11 N., R.21 W., Pickaway County, Hydrologic Unit 05060002, on right bank 100 ft (30.5 m) upstream from U.S. Highway 22 bridge, 1,400 ft (427 m) downstream from Hargus Creek, and 1.0 mi (1.5 km) downstream from Big Darby Creek.

DRAINAGE AREA.--3,217 mi² (8,332 km²).

PERIOD OF RECORD.--October 1973 to current year. Gage height records collected in this vicinity since September 1915, are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 643.03 ft (195.996 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except for winter periods, which are fair. Flow regulated by 5 reservoirs 38 mi (61 km) to 62 mi (100 km) upstream from station (see Station No. 03220500, 03221500, 03225500, 03228400, and 03228805). Water-quality data collected at this site 1973 to 1977.

AVERAGE DISCHARGE.--5 years, 3,004 ft³/s (85.07 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 61,500 ft³/s (1,740 m³/s) Feb. 25, 1975, gage height, 21.95 ft (6.690 m); minimum daily, 290 ft³/s (8.21 m³/s) Feb. 6-9, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913 reached a stage of 28.2 ft (8.60 m), from information supplied by National Weather Service.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 37,300 ft³/s (1056 m³/s) Mar. 16, gage height, 19.03 ft (5.800 m); minimum daily, 369 ft³/s (10.5 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1070	469	6490	1900	3100	820	11400	2770	2520	906	442	4240
2	6220	474	7620	1700	2700	820	10200	2520	2070	1600	413	1870
3	3340	476	5660	1500	2300	820	8940	2180	1870	1880	402	1180
4	1930	471	5230	1350	2100	820	7390	2070	1850	1860	489	872
5	1290	536	6360	1300	1900	820	5640	3000	1430	1550	510	766
6	1160	513	12600	1300	1700	820	5320	2710	1280	1520	920	642
7	1300	542	7450	1340	1600	840	7560	2200	1250	1580	3230	641
8	1110	703	4460	5380	1500	840	9560	2110	3290	1360	1770	557
9	1960	546	4000	12300	1400	880	7270	4120	4510	1110	888	554
10	2420	546	3250	7720	1300	900	5970	3720	2750	930	782	521
11	1780	558	2370	5670	1200	1100	4770	2480	1910	819	1470	455
12	1300	533	2320	4360	1200	2400	3980	2110	1530	722	1190	474
13	1120	482	2380	3530	1100	5600	3430	3490	1560	639	2650	502
14	961	458	7550	3080	1100	14700	3080	6910	1270	652	1200	481
15	800	447	19400	2570	1000	30800	2810	7420	1110	606	1350	500
16	726	452	25300	2100	980	36100	2570	6490	1150	585	934	519
17	663	1110	22400	1800	960	31400	2430	6690	1210	601	1120	559
18	601	1460	19100	1600	940	26400	2350	5820	1110	510	788	538
19	560	975	17200	1400	900	20000	4580	4940	3690	482	603	520
20	554	785	15000	1300	880	19100	7470	4440	4980	442	636	503
21	526	1170	11900	1200	880	20100	8330	4120	3350	410	611	440
22	502	2870	7660	1100	860	23400	10300	3510	2440	407	493	442
23	668	2120	5440	1100	840	24900	8630	2890	2140	392	462	473
24	607	1610	4160	1100	840	22500	8730	3170	1640	575	447	429
25	487	1200	3830	1720	820	20000	7840	6320	1260	776	416	424
26	504	1070	5820	5510	820	22200	8130	7320	1360	714	399	424
27	536	949	5310	8280	820	30200	6160	6820	1140	582	392	390
28	472	837	3630	6400	820	27400	4490	4760	1310	490	683	375
29	470	822	3070	5200	---	17200	3610	3110	1290	451	1600	374
30	470	1290	2640	4200	---	11700	3050	2870	1080	439	1130	369
31	455	---	2200	3600	---	10700	---	3380	---	447	3770	---
TOTAL	36562	26474	251800	102610	36560	426280	185990	126460	59350	26037	32190	21034
MEAN	1179	882	8123	3310	1306	13750	6200	4079	1978	840	1038	701
MAX	6220	2870	25300	12300	3100	36100	11400	7420	4980	1880	3770	4240
MIN	455	447	2200	1100	820	820	2350	2070	1080	392	392	369

CAL YR 1977 TOTAL 850998 MEAN 2332 MAX 25300 MIN 290
WTR YR 1978 TOTAL 1331347 MEAN 3648 MAX 36100 MIN 369

03230800 DEER CREEK AT MOUNT STERLING, OH

LOCATION.--39°42'54", long 83°15'26", Madison County, Hydrologic Unit 05060002, on left bank at downstream side of bridge on State Highway 56, 0.2 mi (0.3 km) downstream from unnamed right bank tributary, 0.6 mi (1.0 km) southeast of Mount Sterling, and 4.9 mi (7.9 km) upstream from Duffs Fork.

DRAINAGE AREA.--228 mi² (591 km²).

PERIOD OF RECORD.--October 1966 to current year.

REVISED RECORDS.--WDR OH-75-1: 1968(M).

GAGE.--Water-stage recorder. Datum of gage is 836.25 ft (254.889 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Water-quality data collected at this site 1967 to 1977. Sediment data collected 1970 to 1974.

AVERAGE DISCHARGE.--12 years, 224 ft³/s (6.34 m³/s), 13.35 in/yr (339 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,600 ft³/s (329 m³/s) May 24,1968, gage height, 11.87 ft (3.618 m); minimum, 5.1 ft³/s (0.14 m³/s) Nov. 24, 1970, July 28, 29, and Aug. 6, 7, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1900 ft³/s (53.8 m³) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 15	0300	3470	98.3	8.56	2.609	Mar. 21	2330	2410	68.3	7.82	2.384
Jan. 8	1930	1960	55.5	7.44	2.268	Mar. 26	2400	2790	79.0	8.10	2.469
Mar. 15	0600	*8060	228	*10.66	3.249						

Minimum discharge 7.5 ft³/s (0.21 m³/s) Sept. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	17	940	110	230	64	436	159	114	44	19	166
2	183	17	919	100	210	64	341	139	100	49	17	89
3	167	16	541	90	190	64	292	127	100	64	16	51
4	91	17	468	85	180	64	253	127	86	69	16	37
5	59	20	1030	80	170	62	220	141	78	60	15	29
6	49	20	1450	85	160	62	210	123	78	53	18	24
7	45	17	652	120	150	62	299	108	86	48	44	21
8	45	22	400	1260	140	61	329	116	314	43	75	19
9	61	22	300	1050	130	64	250	220	370	39	45	17
10	78	22	220	430	120	68	214	189	240	35	36	16
11	72	20	210	340	110	80	198	144	159	35	45	15
12	55	19	200	290	100	172	175	129	127	31	33	14
13	46	19	200	240	96	551	149	366	116	28	66	15
14	41	17	1790	200	94	3230	132	784	98	28	45	15
15	36	15	3280	170	90	6640	118	877	84	28	31	16
16	31	18	1580	150	86	3940	108	582	78	24	26	16
17	28	37	1070	130	82	2570	103	728	72	21	22	16
18	26	52	837	110	78	1640	116	521	68	19	21	17
19	26	45	658	90	76	1330	387	370	99	18	20	15
20	25	38	566	100	74	1560	487	288	89	17	17	13
21	23	51	473	120	72	2070	396	250	81	16	20	12
22	21	103	353	140	70	1990	306	198	76	15	16	11
23	20	98	277	180	68	1420	247	183	65	15	14	11
24	20	78	257	170	68	1280	233	198	62	18	13	12
25	19	62	292	160	66	1120	250	183	58	30	12	9.6
26	22	52	190	540	66	2540	521	159	57	47	12	7.9
27	28	46	170	400	66	2350	409	144	58	38	13	11
28	25	44	150	350	66	1280	277	129	57	25	17	10
29	22	37	140	310	---	863	220	123	53	20	26	8.8
30	20	80	130	280	---	630	186	118	46	20	34	10
31	18	---	120	250	---	511	---	132	---	20	120	---
TOTAL	1430	1121	19863	8130	3108	38402	7862	8055	3169	1017	924	724.3
MEAN	46.1	37.4	641	262	111	1239	262	260	106	32.8	29.8	24.1
MAX	183	103	3280	1260	230	6640	521	877	370	69	120	166
MIN	18	15	120	80	66	61	103	108	46	15	12	7.9
CFSM	.20	.16	2.81	1.15	.49	5.43	1.15	1.14	.47	.14	.13	.11
IN.	.23	.18	3.24	1.33	.51	6.27	1.28	1.31	.52	.17	.15	.12

CAL YR 1977 TOTAL 49579.0 MEAN 136 MAX 3280 MIN 5.4 CFSM .60 IN 8.09
WTR YR 1978 TOTAL 93805.3 MEAN 257 MAX 6640 MIN 7.9 CFSM 1.13 IN 15.30

03230900 DEER CREEK NEAR PANCOASTBURG, OH

LOCATION.--Lat 39°37'14", long 83°12'47", Pickaway County, Hydrologic Unit 05060002, on left bank 200 ft (61 m) downstream from bridge on Crownover Mill Road, 1,200 ft (366 m) downstream from Deer Creek Dam, and 2.8 mi (4.5 km) east of Pancoastburg.

DRAINAGE AREA.--277 mi² (717 km²).

PERIOD OF RECORD.--Water years 1964-66 (Occasional low-flow measurements and annual maximums), July 1966 to current year.

REVISED RECORDS.--WRD Ohio 1972: 1971.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft (213.360 m) Corps of Engineers bench mark. Oct. 23, 1963, to June 30, 1966, crest-stage gage at site 200 ft (61 m) upstream at datum 59.84 ft (18.239 m) higher.

REMARKS.--Records good. Flow regulated by Deer Creek Lake (see station 03230890). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--12 years 255 ft³/s (7.222 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,500 ft³/s (552 m³/s) (estimated) Mar. 10, 1964, gage height, 80.93 ft (24.667 m), present datum; no flow May 25-27, 1968, result of dam closure.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,530 ft³/s (71.6 m³/s) Mar. 23, gage height, 74.46 ft (22.695 m); minimum daily, 6.5 ft³/s (0.18 m³/s) Aug. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	374	28	486	188	387	90	2290	132	179	54	17	95
2	352	27	710	171	383	90	2310	132	163	54	17	95
3	350	27	612	1[illegible]	468	90	2350	132	160	54	17	96
4	348	27	609	102	546	90	2350	132	157	54	17	96
5	411	27	745	102	537	86	2340	132	152	54	17	80
6	437	27	1260	102	268	74	2300	132	152	54	17	58
7	431	27	1380	102	139	76	2340	134	150	54	17	22
8	423	27	1150	856	139	76	2110	134	219	54	17	12
9	409	27	425	1410	139	76	1230	134	302	54	17	12
10	339	26	217	753	139	77	460	134	298	54	24	12
11	210	25	217	426	139	76	257	137	298	54	47	12
12	77	25	215	426	139	76	257	177	298	45	55	12
13	74	25	214	359	139	343	194	222	200	32	55	12
14	65	25	507	290	139	283	86	460	127	32	64	12
15	51	25	1440	216	94	11	12	829	90	25	77	12
16	47	25	2160	139	74	16	14	1000	70	15	79	12
17	35	25	2240	142	94	19	15	1090	54	16	79	12
18	22	25	1530	188	102	682	15	722	55	18	70	12
19	19	25	1160	210	104	1720	15	367	55	18	45	12
20	19	32	1130	206	102	2430	15	294	115	18	33	12
21	19	48	856	163	102	2120	16	294	150	18	33	12
22	20	56	438	107	102	1330	16	294	150	18	16	12
23	20	61	294	88	84	1650	16	177	118	18	6.5	12
24	20	62	290	88	66	2500	16	120	77	18	9.5	12
25	21	64	290	115	61	2210	17	120	55	18	9.8	12
26	21	61	302	232	59	236	17	120	54	18	9.8	12
27	20	61	290	279	61	7.9	69	120	54	17	9.7	12
28	20	65	213	383	83	7.3	290	122	54	17	9.8	10
29	20	66	142	383	---	286	298	122	54	17	9.5	10
30	19	61	174	387	---	1710	188	125	54	17	30	11
31	25	---	188	387	---	2340	---	174	---	17	85	---
TOTAL	4718	1132	21884	9115	4889	20878.2	21903	8414	4114	1006	1009.6	813
MEAN	152	37.7	706	294	175	673	730	271	137	32.5	32.6	27.1
MAX	437	66	2240	1410	546	2500	2350	1090	302	54	85	96
MIN	19	25	142	88	59	7.3	12	120	54	15	6.5	10

CAL YR 1977 TOTAL 55681.1 MEAN 153 MAX 2240 MIN 8.0
WTR YR 1978 TOTAL 99875.8 MEAN 274 MAX 2500 MIN 6.5

03231000 DEER CREEK AT WILLIAMSPORT, OH

LOCATION.--Lat 39°35'09", long 83°07'22", Pickaway County, Hydrologic Unit 05060002, on left bank at downstream side of bridge on U.S. Highway 22 at west edge of Williamsport, 2.0 mi (3.2 km) downstream from Dry Run, and 7.6 mi (12.2 km) upstream from Hay Run.

DRAINAGE AREA.--333 mi² (862 km²).

PERIOD OF RECORD.--August 1926 to December 1935, January 1938 to September 1956, water years 1959, 1961-62, annual maximum. July 1962 to current year.

REVISED RECORDS.--WSP 1083: 1929. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 718.66 ft (219.048 m) National Geodetic Vertical Datum of 1929. Prior to Feb. 29, 1940, nonrecording gage, and Feb. 29, 1940, to Aug. 24, 1954, water-stage recorder, same site at datum 3.00 ft (0.914 m) higher. Aug. 24, 1954 to Sept. 30, 1956, nonrecording gage at same site and datum. Oct. 1, 1958, to June 1962, crest-stage gage at site 120 ft (37 m) downstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Deer Creek Lake 9.0 mi (14.5 km) upstream beginning in 1968. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--43 years (1926-35, 1938-56, 1962-78), 292 ft³/s (8.269 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,600 ft³/s (1,120 m³/s) Jan. 22, 1959, gage height, 17.6 ft (5.36 m) (from floodmarks), from rating curve extended above 25,000 ft³/s(708 m³/s) on basis of contracted-opening measurement of peak flow; minimum daily, 1.8 ft³/s (0.051 m³/s) July 25, 1934, Oct. 1-4, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,140 ft³/s (117 m³/s) Mar. 14, gage height, 9.68 ft (2.950 m); minimum daily, 16 ft³/s (0.45 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	471	31	755	222	520	103	2730	154	201	60	24	144
2	495	31	1160	211	600	104	2690	150	175	66	24	126
3	470	30	959	168	700	108	2720	146	170	66	24	122
4	451	30	923	140	760	98	2750	152	163	63	24	121
5	506	30	1620	115	760	106	2720	157	161	61	24	106
6	560	32	1920	113	450	83	2720	146	157	59	39	78
7	538	33	1980	120	300	81	2750	142	159	57	47	50
8	531	32	1720	1290	210	81	2590	161	231	57	34	22
9	524	32	733	2050	200	81	1730	218	376	57	30	21
10	447	32	465	1200	200	84	613	187	346	56	36	20
11	327	32	467	689	200	92	308	166	338	55	66	20
12	101	31	400	557	200	199	298	192	333	54	74	20
13	95	31	311	461	200	685	247	278	265	36	69	19
14	86	31	1330	346	180	2960	144	509	161	37	67	19
15	68	30	2200	308	150	1540	36	918	118	36	92	19
16	53	31	2860	201	130	719	35	1220	93	25	92	19
17	46	37	2970	254	140	406	35	1370	64	23	92	19
18	33	39	2300	300	160	728	41	923	66	23	90	19
19	23	35	1610	300	160	2100	74	464	205	24	59	18
20	21	36	1550	260	160	3050	72	327	136	24	39	18
21	21	77	1260	200	150	3010	59	322	197	24	37	18
22	20	111	619	150	120	1900	50	314	185	25	34	17
23	20	103	367	150	100	1940	46	237	159	26	18	17
24	19	108	361	230	85	2990	49	146	104	28	18	17
25	19	99	367	300	78	2990	76	140	67	27	19	18
26	23	101	384	420	78	1660	132	134	64	26	19	17
27	23	93	390	540	84	481	87	130	63	26	20	18
28	22	95	361	600	86	237	298	132	61	25	21	18
29	21	99	249	560	---	273	341	132	60	25	20	16
30	21	128	211	540	---	1920	240	140	59	26	23	18
31	21	---	224	520	---	2770	---	185	---	26	107	---
TOTAL	6076	1660	33046	13515	7161	33579	26683	9992	4939	1223	1382	1174
MEAN	196	55.3	1066	436	256	1083	889	322	165	39.5	44.6	39.1
MAX	560	128	2970	2050	760	3050	2750	1370	378	66	107	144
MIN	19	30	211	113	78	81	35	130	59	23	18	16

CAL YR 1977 TOTAL 79348 MEAN 217 MAX 2970 MIN 12
WTR YR 1978 TOTAL 140430 MEAN 385 MAX 3050 MIN 16

03231500 SCIOTO RIVER AT CHILLICOTHE, OH

LOCATION.--Lat 39°20'29", long 82°58'16", Ross County, Hydrologic Unit 05060002, on right bank at north end of Chillicothe, 1,400 ft (427 m) downstream from Bridge Street bridge, 7.4 mi (11.9 km) upstream from Paint Creek, and 15.4 mi (24.8 km) downstream from Deer Creek.

DRAINAGE AREA.--3,849 mi² (9,969 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1913 to September 1914 (gage heights and discharge measurements only). October 1920 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected in this vicinity since 1907 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 803: 1929(M). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 594.05 ft (181.066 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1914, nonrecording gage at site 1,300 ft (396 m) upstream of different datum. Apr. 1, 1921, to Aug. 6, 1930, nonrecording gage, at site 1,400 ft (427 m) upstream at present datum. Aug. 7, 1930, to Sept. 30, 1969, water-stage recorder 900 ft (274 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by 6 reservoirs 36 mi (58 km) to 91 mi (146 km) upstream from station (see stations 03220500, 03221500, 03225000, 03228400, 03228850, 03230890).

AVERAGE DISCHARGE.--58 years, 3,374 ft³/s (95.55 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 144,000 ft³/s (4,080 m³/s) Jan. 23, 1959, gage height, 32.5 ft (9.906 m), (from high-water mark in well); minimum daily, 166 ft³/s (4.70 m³/s) Sept. 27, 1944.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913 reached a stage of 39.8 ft (12.13 m), discharge, 260,000 ft³/s (7,360 m³/s) (estimated by Franklin County Conservancy District).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 34,700 ft³/s (983 m³/s) Mar. 17, gage height, 14.68 ft (4.474 m); minimum daily, 447 ft³/s (12.7 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	846	579	5220	2410	6400	1120	15500	3390	3530	1180	641	5610
2	5900	610	11000	2230	5600	1060	14900	3030	2600	1550	606	2620
3	5960	610	8660	1970	4700	1110	13700	2640	2320	1890	577	1470
4	3180	606	7680	1640	4000	1100	12500	2460	2180	2110	570	1150
5	2110	613	8580	1540	3500	1050	10100	2960	1930	1800	667	970
6	1800	682	14300	1530	3000	1040	9160	3630	1660	1580	740	860
7	1950	613	13500	1530	2600	1060	10400	2730	1570	1680	2520	787
8	1770	779	8370	4180	2400	1090	13500	2600	2090	1570	2710	746
9	2200	751	6260	14700	2200	1060	11800	4360	5550	1350	1340	650
10	3070	651	5120	15500	2000	1120	8970	5610	4540	1170	986	650
11	2770	670	3970	11300	1900	1380	5930	3390	2770	1060	1950	587
12	1920	672	3610	7220	1800	2730	5240	2690	2170	967	1660	552
13	1450	635	3150	5060	1700	8060	4450	3660	1970	884	2660	587
14	1290	585	6800	4180	1600	18100	3820	8430	1830	890	1990	605
15	1110	565	16600	3340	1500	27400	3340	9910	1480	884	1370	561
16	993	582	21900	2640	1400	32400	2960	10200	1380	789	1410	632
17	892	681	25200	2390	1400	33800	2710	10000	1430	773	1170	614
18	841	1690	23900	2340	1300	30500	2660	9080	1360	728	1220	660
19	750	1300	20900	1930	1300	26600	4290	7220	2360	662	909	614
20	711	983	19200	1880	1200	23700	8460	5750	5630	633	781	605
21	701	971	16900	1880	1200	23800	9860	5460	5190	591	843	570
22	655	2680	12200	1730	1200	24500	11800	4720	3030	575	708	511
23	633	2760	8090	1680	1160	26[illegible]	11100	3990	2650	502	647	544
24	865	2050	5950	1850	1150	26700	10700	3570	2080	606	613	536
25	680	1580	4810	1820	1130	25800	10300	6350	1660	895	581	511
26	629	1280	6300	5430	1120	27000	10500	8750	1410	900	559	503
27	670	1220	7470	11400	1090	28000	9020	8890	1540	830	552	503
28	647	1080	5590	10000	1090	30200	6050	7120	1250	705	550	455
29	591	1040	4420	9000	---	24700	5000	4360	1590	638	1340	447
30	601	1110	3280	8000	---	17700	3950	3320	1310	644	1320	471
31	583	---	2730	7200	---	15200	---	3720	---	683	2280	---
TOTAL	48768	30628	311660	149200	60640	485280	252670	163990	72060	31779	36470	26581
MEAN	1573	1021	10050	4813	2166	15650	8422	5290	2402	1025	1176	886
MAX	5960	2760	25200	15500	6400	33800	15500	10200	5630	2110	2710	5610
MIN	583	565	2730	1530	1090	1040	2660	2460	1250	562	550	447

CAL YR 1977 TOTAL 1064740 MEAN 2917 MAX 25200 MIN 400
WTR YR 1978 TOTAL 1669726 MEAN 4575 MAX 33800 MIN 447

03231500 SCIOTO RIVER AT CHILLICOTHE, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1950-51, 1965 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1965 to current year.
pH: May 1965 to current year.
WATER TEMPERATURES: October 1950 to September 1951, October 1953 to current year.
DISSOLVED OXYGEN: May 1965 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. Dissolved oxygen concentrations listed as 15.0 mg/L represent concentrations of 15.0 mg/L or higher due to instrument limitations, prior to Mar. 29, 1978; 20.0 mg/L thereafter.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,210 micromhos Jan. 13, 1976; minimum, 150 micromhos June 29, 1972.
pH: Maximum, 9.2 units Dec. 24, 26, 1973; minimum, 6.7 units Apr. 1, 2, 1975, Jan. 20, 29, 31, Feb. 1, 1976.
WATER TEMPERATURES: Maximum, 32.0°C July 14, 1954, Aug. 2, 3, 1955, July 20, 1977; minimum, 0.0°C on many days during winter periods.
DISSOLVED OXYGEN: Maximum, 20.0 mg/L or higher July 28, 29, Aug. 4, 1978; minimum, 0.0 mg/L Apr. 27, Aug. 12, Sept. 22, 1966.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,120 micromhos Mar. 8; minimum, 290 micromhos Mar. 15.
pH: Maximum, 8.7 units Aug. 4; minimum, 7.0 units Aug. 7.
WATER TEMPERATURES: Maximum, 28.5°C July 22, 23; minimum, 0.5°C Dec. 10-12, 27-29, Jan. 4, 9-13, 27-30.
DISSOLVED OXYGEN: Maximum, 20.0 mg/L or higher July 28, 29, Aug. 4; minimum, 2.9 mg/L Oct. 2.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	696	572	801	777	752	654	672	647	624	602	870	846
2	795	450	812	801	642	537	686	672	603	590	845	822
3	486	423	827	801	593	567	696	678	614	596	872	822
4	521	480	840	828	621	594	713	698	623	594	1050	843
5	552	521	827	801	611	525	777	707	600	587	945	848
6	591	531	810	786	537	461	800	731	642	591	1100	858
7	630	591	821	810	572	467	749	738	668	644	914	872
8	696	618	851	821	669	578	746	581	686	671	1120	890
9	696	645	851	771	741	624	581	470	701	686	942	878
10	702	630	807	764	654	642	527	465	717	701	903	870
11	647	626	809	765	687	653	809	531	737	710	897	869
12	665	645	765	750	735	690	708	591	788	714	888	830
13	695	666	789	759	861	711	614	597	734	723	821	558
14	824	696	804	785	707	567	650	614	869	732	548	296
15	735	701	792	786	581	456	690	651	761	740	351	290
16	752	734	800	765	477	438	707	690	804	750	398	345
17	759	732	824	765	483	452	707	704	942	765	399	333
18	753	741	809	782	447	419	705	702	837	801	332	317
19	813	746	821	674	423	419	714	705	821	797	350	327
20	807	795	668	608	429	420	719	708	815	801	359	336
21	801	767	705	585	483	434	732	717	852	813	341	336
22	792	768	740	704	521	485	743	732	825	806	344	336
23	819	794	701	585	545	522	759	743	837	804	345	336
24	833	821	645	605	569	548	756	716	843	800	353	341
25	830	806	674	647	606	570	926	714	960	804	398	353
26	882	834	683	675	618	605	732	593	860	818	396	372
27	884	812	693	683	615	560	698	566	830	812	389	383
28	812	804	905	692	575	560	563	539	921	822	387	368
29	815	804	929	713	594	578	558	543	---	---	431	392
30	819	804	825	645	---	---	575	560	---	---	456	432
31	809	777	---	---	645	635	609	576	---	---	452	425
MONTH	884	423	929	585	861	419	926	465	960	587	1120	290

03231500 SCIOTO RIVER AT CHILLICOTHE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	426	416	669	633	512	470	684	383	780	752	576	416
2	438	419	659	645	534	426	719	549	762	749	468	420
3	456	437	672	659	564	512	720	666	771	624	524	472
4	458	434	680	563	594	566	692	656	764	488	580	524
5	491	453	---	---	597	594	663	630	777	714	628	580
6	521	491	---	---	602	486	669	650	798	675	670	632
7	533	519	---	---	665	465	696	672	801	635	692	670
8	527	510	---	---	657	482	699	683	623	528	700	686
9	---	---	---	---	611	437	714	687	545	533	712	700
10	---	---	---	---	543	447	737	714	---	---	730	712
11	600	590	---	---	590	543	726	717	---	---	754	732
12	626	603	---	---	639	593	735	723	---	---	756	744
13	642	626	---	---	654	635	750	737	---	---	824	746
14	662	648	---	---	680	656	759	689	---	---	790	698
15	672	662	---	---	692	680	740	717	---	---	766	752
16	683	674	---	---	707	678	753	725	---	---	774	492
17	690	681	---	---	726	708	758	741	---	---	772	770
18	695	578	---	---	743	725	780	756	---	---	782	770
19	707	653	582	503	737	693	785	773	---	---	800	782
20	669	551	561	521	687	347	794	773	---	---	804	794
21	579	549	587	561	429	357	795	779	---	---	816	784
22	590	558	596	572	585	444	792	783	---	---	792	766
23	593	560	740	581	623	573	786	780	744	714	784	768
24	582	531	735	702	623	612	789	639	744	734	794	778
25	548	533	741	618	638	452	792	752	732	720	810	794
26	542	524	609	473	686	591	831	795	728	712	846	812
27	537	521	524	498	705	683	816	759	736	636	850	838
28	579	539	507	477	728	624	756	705	756	676	836	824
29	606	579	501	477	698	672	713	446	796	716	836	824
30	632	608	539	501	714	674	728	488	800	596	836	360
31	---	---	530	477	---	---	750	450	644	548	---	---
MONTH	707	416	741	473	743	347	831	383	801	488	850	360
YEAR	1120	290										

03231500 SCIOTO RIVER AT CHILLICOTHE, OH--Continued

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.8	7.8	7.8	7.6	7.8	7.6	7.9	7.6	8.0	7.8	8.1	8.0
2	7.7	7.2	7.8	7.6	8.0	7.8	7.9	7.9	7.9	7.8	8.2	8.1
3	7.6	7.2	7.8	7.6	8.1	8.0	7.9	7.9	7.9	7.8	8.2	8.1
4	7.7	7.5	8.2	7.6	8.0	7.9	8.0	7.7	7.9	7.8	8.1	8.0
5	7.7	7.6	7.9	7.6	8.2	7.9	7.7	7.7	7.9	7.8	8.1	8.0
6	7.7	7.6	7.7	7.6	8.1	7.9	7.8	7.7	8.1	7.9	8.1	8.0
7	7.7	7.7	7.7	7.6	8.0	8.0	7.7	7.5	8.1	7.9	8.1	7.9
8	7.9	7.6	7.7	7.6	8.1	8.0	7.9	7.4	8.0	7.9	8.1	8.0
9	7.9	7.7	7.7	7.5	8.2	8.0	8.0	7.8	8.0	7.9	8.1	8.0
10	7.8	7.7	7.6	7.5	8.2	8.1	8.0	7.9	8.0	7.9	8.1	8.0
11	7.9	7.7	7.7	7.5	8.1	8.0	8.2	7.9	8.0	7.8	8.0	8.0
12	7.9	7.9	7.9	7.7	8.1	7.9	8.0	7.8	7.9	7.7	8.0	7.9
13	8.0	7.9	7.8	7.7	8.0	7.9	7.8	7.8	7.9	7.8	8.0	7.5
14	8.0	7.7	7.8	7.6	8.1	7.6	7.9	7.8	8.1	7.8	7.9	7.5
15	7.8	7.7	7.7	7.6	7.6	7.5	8.0	7.9	8.0	7.9	7.9	7.5
16	7.7	7.7	7.7	7.6	7.7	7.4	7.9	7.8	8.0	7.8	7.9	7.8
17	7.8	7.7	7.8	7.6	7.7	7.3	7.9	7.8	8.0	7.8	7.8	7.8
18	7.8	7.8	7.6	7.5	7.7	7.4	7.9	7.8	8.1	8.0	7.9	7.7
19	7.8	7.8	---	---	7.8	7.7	7.8	7.8	8.2	8.0	7.9	7.8
20	7.8	7.8	---	---	7.9	7.7	7.8	7.8	---	---	8.0	7.7
21	7.9	7.8	---	---	7.9	7.8	7.9	7.8	8.0	7.9	7.9	7.8
22	7.9	7.8	---	---	7.9	7.9	7.9	7.8	8.0	7.9	7.9	7.8
23	7.8	7.7	---	---	7.9	7.7	7.9	7.8	8.0	7.8	8.0	7.8
24	7.8	7.7	---	---	7.8	7.7	8.1	7.7	8.0	7.8	8.0	7.9
25	7.7	7.7	---	---	8.0	7.8	7.7	7.5	8.0	7.8	8.2	8.0
26	7.8	7.7	---	---	8.1	8.0	8.0	7.6	8.1	8.0	8.3	8.2
27	7.9	7.7	---	---	8.1	8.1	7.8	7.6	8.1	7.9	8.2	8.1
28	8.1	7.9	---	---	8.1	7.8	7.7	7.6	8.1	7.9	8.1	7.9
29	8.0	7.9	---	---	7.8	7.8	7.7	7.7	---	---	8.1	8.0
30	7.9	7.8	---	---	---	---	7.9	7.7	---	---	8.1	7.7
31	7.8	7.7	---	---	7.6	7.3	8.0	7.7	---	---	7.7	7.5
MONTH	8.1	7.2	8.2	7.5	8.2	7.3	8.2	7.4	8.2	7.7	8.3	7.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.6	7.4	8.1	8.0	7.5	7.4	8.0	7.8	7.8	7.7	7.7	7.6
2	7.7	7.5	8.1	8.1	7.5	7.5	7.9	7.7	8.1	7.6	7.8	7.7
3	7.9	7.7	8.1	8.0	7.5	7.4	7.7	7.4	8.3	7.8	7.8	7.8
4	8.1	7.7	8.1	8.0	7.6	7.5	7.7	7.4	8.7	8.0	7.9	7.8
5	7.8	7.4	---	---	7.6	7.5	7.8	7.7	8.4	8.0	8.0	7.9
6	---	---	---	---	7.6	7.6	7.8	7.8	8.0	7.2	8.1	7.9
7	---	---	---	---	7.9	7.6	7.8	7.7	7.3	7.0	8.1	7.9
8	---	---	---	---	7.8	7.6	7.8	7.7	7.5	7.3	8.2	7.9
9	---	---	---	---	7.6	7.5	7.8	7.7	7.5	7.5	8.3	8.0
10	---	---	---	---	7.6	7.5	7.9	7.8	7.9	7.8	8.3	8.0
11	8.0	7.9	---	---	7.7	7.6	8.0	7.8	7.8	7.7	8.3	8.0
12	8.0	7.9	---	---	7.7	7.6	8.3	8.0	7.8	7.7	8.3	8.0
13	8.0	7.9	---	---	7.8	7.8	8.3	8.0	7.8	7.7	8.2	8.0
14	8.0	7.9	---	---	7.9	7.8	8.3	8.0	7.7	7.7	8.1	7.9
15	8.0	7.9	---	---	7.8	7.8	8.3	8.1	7.9	7.7	8.2	8.0
16	8.1	8.0	---	---	7.8	7.7	8.4	8.1	7.9	7.8	8.1	8.0
17	8.1	7.9	---	---	7.8	7.7	8.5	8.1	7.8	7.8	8.0	7.9
18	8.1	7.9	---	---	7.8	7.7	8.4	8.1	7.9	7.8	7.9	7.9
19	---	---	8.0	7.7	7.8	7.6	8.2	7.9	7.9	7.8	8.0	7.8
20	---	---	7.7	7.5	7.6	7.3	8.1	7.8	8.1	7.8	8.1	7.8
21	---	---	7.6	7.6	7.5	7.4	7.9	7.8	8.1	7.9	8.3	7.9
22	---	---	7.7	7.6	7.7	7.6	7.9	7.7	8.3	7.9	8.2	8.0
23	---	---	7.6	7.4	7.7	7.6	8.0	7.8	8.2	7.9	8.4	8.0
24	---	---	7.6	7.4	7.8	7.7	7.9	7.6	8.3	7.9	8.2	8.0
25	---	---	7.7	7.6	7.8	7.6	7.8	7.6	8.3	7.9	8.3	8.0
26	---	---	7.8	7.7	7.8	7.7	7.7	7.5	8.1	7.9	8.2	8.0
27	8.1	7.9	7.8	7.7	7.7	7.7	7.9	7.5	8.0	7.8	8.2	8.0
28	8.0	7.9	7.8	7.7	7.8	7.7	8.4	7.7	8.1	7.9	8.4	8.0
29	8.1	7.9	7.7	7.5	7.8	7.8	8.6	8.0	7.9	7.8	8.4	8.1
30	8.0	7.9	7.6	7.5	7.9	7.7	8.2	7.8	7.8	7.7	8.3	7.9
31	---	---	7.6	7.5	---	---	7.8	7.6	7.7	7.7	---	---
MONTH	8.1	7.4	8.1	7.4	7.9	7.3	8.6	7.4	8.7	7.0	8.4	7.6
YEAR	8.7	7.0										

03231500 SCIOTO RIVER AT CHILLICOTHE, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	21.5	20.0	14.5	14.0	8.0	5.5	3.5	3.0	1.0	1.0	5.0	4.5
2	20.5	19.5	15.0	13.5	7.0	6.5	3.0	2.0	1.5	1.0	4.5	3.5
3	19.0	18.0	16.0	14.5	6.5	6.0	2.0	1.5	1.0	1.0	4.0	3.0
4	17.0	16.5	16.5	15.5	6.0	6.0	1.5	.5	1.5	1.0	4.5	3.0
5	17.0	16.0	18.0	16.0	6.0	5.0	2.5	1.5	1.5	1.0	4.5	2.5
6	17.5	16.5	18.0	17.5	5.0	3.5	3.5	2.5	1.5	1.0	5.5	3.5
7	17.0	16.0	18.5	17.5	3.0	1.5	5.0	3.5	1.0	1.0	5.5	5.0
8	16.5	16.0	18.5	18.0	1.5	1.0	5.5	3.5	1.0	1.0	5.0	5.0
9	16.0	15.0	18.5	17.5	1.5	1.0	3.5	.5	1.5	1.0	6.5	5.0
10	15.5	14.5	18.0	14.0	1.0	.5	.5	.5	2.0	1.0	7.0	5.0
11	14.5	13.5	14.0	11.5	1.0	.5	1.0	.5	2.0	1.0	7.0	5.5
12	13.0	12.5	11.5	9.5	1.0	.5	1.0	.5	2.5	1.5	7.0	5.0
13	13.0	12.0	9.5	8.5	3.0	1.0	1.0	.5	2.0	2.0	5.0	3.0
14	---	---	8.5	8.0	4.0	3.0	1.5	1.0	3.5	2.0	2.5	1.5
15	---	---	9.0	7.5	4.0	3.0	1.5	1.0	3.0	1.5	1.5	1.5
16	---	---	9.5	9.0	3.0	2.5	1.5	1.0	3.5	2.0	2.0	1.5
17	---	---	10.0	9.0	3.5	3.0	1.0	1.0	4.0	3.0	2.5	1.5
18	---	---	9.5	9.0	4.0	3.5	1.5	1.0	3.5	2.5	2.5	1.5
19	---	---	9.5	8.0	4.0	4.0	2.0	1.5	2.5	1.5	3.5	2.5
20	---	---	8.5	8.0	4.5	4.0	1.5	1.0	2.0	1.0	4.0	3.0
21	---	---	9.5	8.5	4.0	3.5	2.0	1.5	2.5	1.0	5.0	4.0
22	---	---	9.5	8.5	3.5	3.0	2.0	1.5	2.5	1.5	5.5	4.0
23	---	---	9.5	8.5	3.5	3.0	1.0	1.0	2.5	1.5	5.5	5.0
24	---	---	9.0	8.5	4.5	3.5	1.0	1.0	3.5	2.0	5.0	4.5
25	---	---	8.5	7.0	4.5	3.0	2.5	1.0	4.5	3.0	4.5	4.0
26	---	---	7.0	5.0	3.0	1.5	2.5	1.0	5.0	3.5	5.5	4.5
27	---	---	5.0	3.5	1.5	.5	1.0	.5	5.0	3.5	5.5	5.5
28	---	---	4.5	3.5	1.0	.5	1.0	.5	5.5	4.0	6.5	5.0
29	---	---	4.0	3.5	1.0	.5	1.0	.5	---	---	7.5	6.5
30	---	---	5.5	4.0	---	---	1.0	.5	---	---	7.5	7.0
31	---	---	---	---	3.0	3.0	1.0	1.0	---	---	8.0	6.5
MONTH	21.5	12.0	18.5	3.5	8.0	.5	5.5	.5	5.5	1.0	8.0	1.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.0	7.5	15.5	13.5	24.0	22.0	26.5	24.5	25.5	23.0	22.5	21.0
2	9.0	8.5	15.5	13.0	23.5	22.5	25.0	23.5	26.5	24.0	22.5	20.5
3	8.5	7.5	15.5	13.5	23.5	22.0	23.5	23.0	26.0	25.0	23.5	21.0
4	9.5	8.0	14.5	13.5	22.5	21.0	23.0	22.0	26.5	24.0	24.0	22.0
5	10.5	9.0	13.5	12.5	22.5	21.0	23.0	22.0	24.5	23.5	24.5	21.5
6	11.0	10.0	12.5	12.0	22.0	21.0	24.0	21.5	24.0	23.0	25.0	22.5
7	12.0	10.5	12.5	12.0	22.0	20.5	25.0	23.0	24.0	23.0	25.0	23.0
8	12.0	11.5	13.5	12.5	23.0	21.5	25.5	23.5	24.0	22.0	26.0	23.5
9	---	---	15.0	13.5	22.0	21.0	26.0	24.5	25.0	23.0	26.5	24.0
10	---	---	---	---	22.0	20.0	25.5	24.5	25.0	24.0	27.0	25.0
11	14.0	13.0	---	---	23.0	20.5	25.0	23.5	24.0	23.0	27.0	25.0
12	---	---	---	---	23.0	21.5	25.5	23.0	24.5	23.0	26.5	25.0
13	---	---	---	---	22.0	20.5	24.0	23.0	25.0	23.5	26.5	25.5
14	---	---	---	---	21.5	19.0	25.5	23.0	25.0	23.0	25.5	24.5
15	15.0	13.0	---	---	20.5	19.5	25.0	23.5	26.5	24.5	26.0	24.0
16	14.0	12.5	---	---	22.0	20.0	26.0	24.0	26.0	25.0	24.5	23.5
17	14.5	12.0	---	---	23.5	21.0	26.0	23.5	27.0	24.0	25.0	23.5
18	14.5	12.5	---	---	25.0	22.5	26.0	23.5	27.0	25.0	26.0	24.0
19	14.0	13.0	18.5	16.0	25.5	23.5	27.0	24.0	28.0	25.0	27.0	24.5
20	13.0	11.5	19.5	17.5	24.0	22.5	27.5	25.0	26.5	24.5	27.5	25.5
21	11.0	10.0	19.5	18.5	24.0	23.0	27.5	25.5	26.5	24.0	27.5	25.5
22	11.0	9.5	19.0	17.5	24.0	22.5	28.5	26.0	26.5	23.5	25.5	22.5
23	11.0	10.5	18.0	17.5	24.0	22.0	28.5	26.5	27.0	24.0	23.5	21.0
24	11.5	10.5	18.5	18.0	24.0	22.0	27.0	26.0	27.5	25.0	22.5	21.5
25	11.5	11.0	19.5	18.0	24.5	22.5	26.0	25.0	28.0	25.5	22.0	20.5
26	11.5	11.0	19.5	18.5	25.5	23.0	27.0	24.5	27.0	26.0	21.5	19.5
27	12.5	11.0	21.0	19.5	27.0	24.5	26.5	25.5	28.0	25.5	21.5	19.0
28	14.0	11.5	21.5	20.0	27.5	25.5	26.5	24.5	28.0	25.5	21.0	19.0
29	14.5	13.0	22.5	20.5	28.0	26.0	26.5	24.5	27.0	25.5	20.5	18.0
30	15.5	14.0	23.0	21.5	27.5	26.0	25.0	23.5	26.5	24.5	20.5	18.0
31	---	---	23.5	21.5	---	---	25.0	23.0	24.5	22.5	---	---
MONTH	15.5	7.5	23.5	12.0	28.0	19.0	28.5	21.5	28.0	22.0	27.5	18.0
YEAR	28.5	.5										

03231500 SCIOTO RIVER AT CHILLICOTHE, OH--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.0	6.9	9.0	6.4	9.9	8.7	10.8	10.7	12.8	12.7	11.1	9.6
2	7.2	2.9	9.0	6.0	9.9	9.0	10.8	10.7	12.9	12.8	11.4	10.4
3	6.8	5.1	8.4	5.9	10.4	9.9	11.0	10.8	12.9	12.8	11.4	10.1
4	7.5	6.9	6.8	5.1	10.5	10.3	11.1	10.8	13.1	12.9	10.9	10.0
5	7.6	7.5	7.2	4.8	10.6	10.4	10.8	10.5	13.0	12.8	11.6	10.0
6	7.8	7.5	6.1	4.7	10.5	10.2	10.5	10.2	12.8	12.6	11.4	10.1
7	7.5	7.1	5.6	4.0	11.3	10.6	10.1	9.7	12.8	12.2	11.7	10.1
8	7.1	6.6	4.1	3.3	11.5	11.3	10.2	9.6	12.6	11.9	10.6	9.9
9	7.2	6.6	4.7	3.1	11.5	11.4	11.0	10.2	12.3	11.7	11.2	9.5
10	7.2	6.4	4.9	4.1	11.6	11.4	11.4	11.1	11.9	11.5	11.5	10.1
11	7.8	7.2	6.8	4.1	11.6	11.4	12.2	12.1	12.2	11.9	10.7	9.3
12	8.4	7.8	8.7	6.3	11.5	11.2	12.4	12.2	12.1	11.9	9.5	8.1
13	8.7	8.3	8.6	7.1	11.2	10.9	12.6	12.2	12.1	11.8	11.0	9.2
14	8.4	7.7	8.8	7.0	11.0	10.5	12.8	12.5	12.1	11.9	11.9	11.1
15	7.8	6.9	9.2	7.3	10.7	10.5	12.8	12.6	12.4	12.3	12.4	11.8
16	7.5	6.8	8.2	7.2	10.9	10.7	12.8	12.6	12.6	11.2	---	---
17	7.3	7.1	8.6	7.1	11.0	10.8	12.8	12.6	11.4	11.1	---	---
18	8.0	7.6	7.3	6.0	10.8	10.8	12.7	12.5	11.6	11.4	---	---
19	7.6	6.6	8.0	5.6	10.8	10.4	12.5	12.3	11.6	11.2	---	---
20	7.9	6.7	8.4	7.9	10.4	10.2	12.4	12.2	11.3	11.1	---	---
21	8.9	7.6	8.5	7.8	10.3	10.1	12.4	12.2	11.4	11.1	---	---
22	9.5	8.5	8.0	6.8	10.2	10.1	12.3	12.2	11.4	10.8	---	---
23	8.7	7.3	8.9	6.7	10.3	10.1	12.5	12.2	11.2	10.6	---	---
24	7.8	6.7	8.9	8.5	10.1	9.8	12.7	12.3	10.9	10.3	---	---
25	7.1	5.7	8.9	8.6	9.8	9.7	12.2	12.0	10.7	10.0	12.2	11.7
26	6.8	5.6	9.5	8.5	10.6	9.8	12.5	11.9	10.6	9.8	11.7	11.1
27	7.2	5.3	9.9	9.5	11.0	10.6	12.5	12.1	10.4	9.3	11.0	11.0
28	9.2	7.0	10.2	9.8	13.1	10.7	12.6	12.5	10.4	9.3	11.3	11.0
29	9.5	7.7	10.4	10.1	12.4	12.2	12.7	12.5	---	---	11.2	10.5
30	9.4	7.1	10.5	9.9	---	---	12.9	12.7	---	---	11.1	8.2
31	9.0	6.6	---	---	11.0	10.6	---	---	---	---	11.2	10.9
MONTH	9.5	2.9	10.5	3.1	13.1	8.7	12.9	9.6	13.1	9.3	12.4	8.1

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.0	10.5	8.6	8.1	5.2	4.9	8.5	6.1	12.5	5.6	5.4	3.6
2	10.7	10.5	9.0	8.2	5.2	5.0	6.5	5.1	17.2	5.2	5.9	5.4
3	11.3	10.6	9.1	8.0	5.2	4.9	5.0	4.4	19.8	8.7	6.4	5.9
4	11.0	10.5	8.3	7.7	5.7	5.0	4.7	4.0	20.0	11.0	6.8	5.7
5	10.5	9.9	8.0	7.8	6.0	5.3	5.5	4.4	19.2	8.4	7.4	5.9
6	10.4	9.7	8.2	7.3	6.6	5.8	6.2	5.2	11.1	6.5	8.3	5.8
7	10.2	9.1	8.1	7.6	7.1	6.1	5.8	5.2	7.4	4.3	8.4	5.8
8	9.8	9.2	8.2	7.9	6.8	5.6	5.8	4.9	5.2	3.9	10.0	6.3
9	---	---	8.2	7.6	5.5	4.0	6.1	4.9	5.7	4.8	10.9	6.8
10	---	---	---	---	5.1	4.4	6.5	4.9	---	---	10.9	6.8
11	8.9	6.6	---	---	5.3	5.1	8.7	5.0	---	---	10.2	6.3
12	8.7	8.2	---	---	5.6	5.3	12.0	6.1	---	---	10.0	6.6
13	8.2	8.1	---	---	6.1	5.4	10.8	6.7	---	---	8.4	6.2
14	8.2	8.0	---	---	6.5	6.0	12.7	6.4	---	---	7.8	5.5
15	8.3	8.1	---	---	6.6	5.8	11.2	7.1	---	---	8.8	5.4
16	8.6	8.2	---	---	6.7	5.8	13.8	6.8	6.5	5.4	7.1	5.8
17	8.4	8.1	---	---	6.9	5.5	19.0	8.4	6.0	5.3	6.6	5.1
18	8.7	8.1	---	---	6.9	4.9	17.6	9.2	6.6	4.8	6.1	4.6
19	8.4	7.9	8.2	7.5	6.9	4.1	16.3	7.7	6.9	5.2	6.7	4.3
20	8.6	7.6	7.7	7.3	4.3	3.4	10.5	5.7	6.1	5.0	6.5	5.0
21	9.6	8.5	7.6	7.1	5.0	4.2	7.0	5.2	6.5	5.7	9.9	5.4
22	10.2	9.5	8.2	7.4	5.4	5.0	6.3	4.5	11.0	6.0	7.9	5.7
23	10.2	9.5	7.9	7.2	5.3	5.1	6.8	4.6	10.8	6.6	10.6	6.0
24	10.1	9.6	7.3	6.7	5.7	5.3	9.2	4.9	11.7	6.4	7.9	6.0
25	9.9	9.5	7.3	6.1	5.9	5.5	9.0	6.1	10.7	6.6	9.9	6.1
26	9.7	9.0	7.2	7.0	6.0	5.3	12.5	4.5	8.3	5.9	9.0	6.0
27	9.2	8.6	7.3	7.0	5.7	5.1	16.7	4.6	7.4	5.0	8.9	5.9
28	8.7	8.4	7.1	6.5	6.8	4.8	20.0	6.8	8.2	5.3	10.5	[illegible].1
29	8.6	8.3	6.5	5.6	7.4	5.6	20.0	11.9	6.3	4.9	10.8	6.8
30	8.5	8.2	5.7	5.5	9.0	5.1	14.3	7.3	5.2	4.1	10.0	6.7
31	---	---	5.5	4.8	---	---	11.6	5.3	4.8	4.0	---	---
MONTH	11.3	6.6	9.1	4.8	9.0	3.4	20.0	4.0	20.0	3.9	10.9	3.6
YEAR	20.0	2.9										

03212000 PAINT CREEK NEAR GREENFIELD, OH

LOCATION.--Lat 39°22'45", long 83°22'32", Fayette County, Hydrologic Unit 05060003, on right bank at upstream side of bridge on State Highway 753, 0.6 mi (1.0 km) upstream from Stone Run, 2.0 mi (3.2 km) north of Greenfield, and 3.0 mi (4.8 km) downstream from Indian Creek.

DRAINAGE AREA.--249 mi² (645 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1926 to November 1935, October 1939 to September 1956; water years 1962-66 (occasional low-flow measurements), (annual maximum), water years 1963-66, October 1966 to current year.

REVISED RECORDS.--WSP 743: 1926(M). WSP 758: 1926-33. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 844.27 ft (257.333 m) National Geodetic Vertical Datum of 1929. Prior to Feb. 14, 1940 nonrecording gage, Feb. 14, 1940 to June 3, 1955 water-stage recorder, June 4, 1955 to Sept. 30, 1956 nonrecording gage, at same site at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Sediment data collected at this site 1970 to 1974.

AVERAGE DISCHARGE.--38 years (1926-35, 1939-56, 1966-78), 227 ft³/s (6.429 m³/s), 12.38 in/yr (314 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,700 ft³/s (615 m³/s) May 24, 1969, gage height, 14.28 ft (4.353 m); no flow Sept. 10, 18, 27, 29, 30, Oct. 1, 4, 1953.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft³/s (56.64 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 15	2300	2280	64.6	6.74	2.054	Mar. 21	1630	2120	60.0	6.55	1.996
Mar. 15	2236	*6660	189	*10.19	3.106	Mar. 26	0630	2670	75.6	7.17	2.185

Minimum 5.4 ft³/s (0.15 m³/s) Sept. 29; may have been less during period of no gage-height record Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	20	613	90	680	92	442	183	161	104	50	539
2	220	19	731	87	600	86	357	158	130	369	32	354
3	170	19	566	85	540	80	291	142	113	484	24	219
4	120	17	495	82	490	75	263	144	101	314	20	148
5	80	18	1130	80	460	70	242	156	86	194	18	104
6	55	19	1460	78	420	66	224	134	80	140	23	75
7	43	20	870	100	380	62	221	113	81	108	66	59
8	64	22	550	909	360	60	206	134	199	87	120	49
9	90	20	380	1300	340	56	194	250	506	74	117	40
10	80	19	270	550	320	60	183	286	425	66	341	33
11	57	18	250	400	300	80	163	211	300	61	382	27
12	47	15	220	380	240	307	163	178	214	52	206	23
13	41	13	299	240	260	858	142	456	181	49	124	22
14	36	12	1450	200	240	4040	128	830	144	144	81	19
15	34	11	2010	170	220	5580	109	901	120	148	62	18
16	31	12	1870	150	200	5690	102	807	108	86	51	19
17	27	42	1140	130	190	3480	99	654	97	59	42	31
18	23	49	812	110	180	2190	115	554	87	46	32	23
19	22	40	642	96	170	1760	178	428	185	39	27	17
20	22	37	537	88	160	1680	178	347	255	35	39	14
21	19	56	443	80	150	1920	204	297	192	26	28	16
22	18	90	345	76	140	1900	194	255	242	23	22	13
23	16	91	250	72	130	1410	167	258	176	20	19	8.8
24	15	75	190	70	120	1080	169	309	126	26	18	8.7
25	15	59	150	100	110	1110	216	247	101	39	16	7.8
26	26	52	130	700	110	2150	382	209	92	28	14	7.1
27	35	43	120	1300	100	1820	425	185	81	26	14	6.9
28	30	38	110	1200	96	1260	312	172	94	21	18	7.4
29	28	35	110	1000	---	849	247	161	89	17	34	6.0
30	25	70	100	900	---	634	211	152	67	33	38	6.5
31	22	---	95	800	---	517	---	231	---	56	392	---
TOTAL	1611	1051	18338	11543	7746	41022	6547	9542	4833	2974	2470	1921.2
MEAN	52.0	35.0	592	372	277	1323	218	308	161	95.9	79.7	64.0
MAX	220	91	2010	1300	680	5690	442	901	506	484	392	539
MIN	15	11	95	70	96	56	99	113	67	17	14	6.0
CFSM	.21	.14	2.38	1.49	1.11	5.31	.88	1.24	.65	.39	.32	.26
IN.	.24	.16	2.74	1.72	1.16	6.13	.98	1.43	.72	.44	.37	.29

CAL YR 1977 TOTAL 50071.0 MEAN 137 MAX 2010 MIN 3.2 CFSM .55 IN 7.48
WTR YR 1978 TOTAL 109598.2 MEAN 300 MAX 5690 MIN 6.0 CFSM 1.21 IN 16.37

03232000 PAINT CREEK NEAR GREENFIELD OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to 1978 (Discontinued).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1974 to September 1978 (Discontinued).

INSTRUMENTATION.--Water temperature recorder.

REMARKS.--Interruptions in the water temperature record were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 29.0°C Aug. 2, 3, 1975, July 8, 9, 1977; minimum, 0.0°C on several days during 1975, and on many days during 1978.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 28.0°C July 22; minimum recorded, 0.0°C on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	20.5	19.0	15.5	13.5	6.5	3.5	.5	.0	1.0	.0	.0	.0
2	20.0	18.0	16.0	13.0	6.5	5.5	2.0	.0	.0	.0	.5	.0
3	18.0	15.5	17.0	15.0	5.5	5.0	2.5	.0	.0	.0	.0	.0
4	16.0	14.5	18.0	16.5	6.0	5.0	2.0	.0	.0	.0	.0	.0
5	16.0	14.5	19.0	16.5	5.0	3.5	1.5	.5	.5	.0	1.0	.0
6	18.0	15.5	18.5	18.0	4.0	1.5	1.5	1.0	.5	.0	.0	.0
7	15.5	14.0	18.0	17.0	1.0	.0	1.5	.5	.5	.0	.5	.0
8	15.5	13.0	17.0	15.0	.0	.0	2.0	1.0	.5	.0	.0	.0
9	15.5	14.0	17.5	15.0	.0	.0	1.0	.0	.5	.0	.0	.0
10	14.5	13.5	16.5	9.5	.0	.0	.0	.0	.5	.0	.5	.0
11	13.5	12.0	9.5	7.5	.0	.0	.0	.0	.5	.0	1.0	.0
12	12.0	11.0	7.5	5.5	.0	.0	.0	.0	.5	.0	.0	.0
13	12.0	11.0	6.5	4.0	.0	.0	.0	.0	.5	.0	.0	.0
14	13.0	11.0	6.5	4.5	4.0	.0	.0	.0	.0	.0	.0	.0
15	13.5	11.0	8.0	5.0	4.0	2.5	.0	.0	.0	.0	.0	.0
16	13.0	11.0	9.0	7.5	4.0	2.5	.0	.0	.0	.0	.0	.0
17	11.5	9.5	9.0	7.5	5.5	4.0	.0	.0	.0	.0	.5	.0
18	13.0	10.5	7.5	6.0	6.5	6.0	.0	.0	.0	.0	1.5	.0
19	13.0	11.0	6.5	5.0	6.5	6.0	.0	.0	.0	.0	3.5	.5
20	13.0	10.5	7.5	5.5	6.0	5.0	.0	.0	.0	.0	4.5	1.0
21	13.5	10.5	8.5	7.5	4.5	2.0	.0	.0	.0	.0	5.5	4.5
22	14.5	11.5	7.0	6.5	2.0	.5	.5	.0	.0	.0	6.5	3.5
23	15.0	13.0	7.5	6.5	1.5	.0	.0	.0	.0	.0	7.0	6.5
24	15.5	12.0	7.5	6.5	4.0	1.0	.0	.0	.0	.0	6.5	4.5
25	15.0	14.0	6.0	4.5	4.0	.5	.0	.0	.0	.0	5.0	3.5
26	15.5	14.5	4.5	1.0	1.5	.0	.0	.0	.0	.0	5.5	5.0
27	15.5	14.5	1.0	.0	.5	.0	.0	.0	.0	.0	5.0	4.5
28	14.5	13.5	1.5	.0	.5	.0	.0	.0	.0	.0	7.5	4.0
29	14.5	12.0	1.5	.5	.5	.0	.0	.0	---	---	9.0	7.0
30	14.0	11.5	4.0	1.5	1.0	.0	.5	.0	---	---	9.0	7.0
31	14.5	12.0	---	---	1.0	.5	.5	.0	---	---	11.5	8.0
MONTH	20.5	9.5	19.0	.0	6.5	.0	2.5	.0	1.0	.0	11.5	.0

03232000 PAINT CREEK NEAR GREENFIELD, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	14.0	10.5	15.5	12.0	22.5	19.5	26.0	23.0	24.0	20.5	20.0	18.0
2	12.5	10.0	15.0	11.5	23.0	20.5	23.0	21.5	25.5	21.5	20.5	18.5
3	11.5	9.0	15.5	11.5	22.5	20.0	22.0	20.5	25.5	23.0	21.5	18.5
4	13.0	11.0	14.0	11.5	21.0	18.5	21.0	19.5	24.5	21.0	22.0	20.0
5	14.0	11.5	11.5	11.0	22.0	18.5	21.0	19.5	22.0	20.5	21.5	19.0
6	13.0	12.0	12.0	10.5	20.5	19.0	22.5	19.5	22.5	20.5	22.5	19.0
7	15.5	11.5	11.0	10.5	21.5	19.0	24.5	21.0	23.5	21.5	23.0	19.5
8	14.0	12.5	13.5	11.0	22.5	20.5	25.0	23.0	23.0	20.5	24.0	20.5
9	13.5	11.0	16.0	12.5	21.0	19.0	25.0	23.0	24.0	21.5	24.5	21.5
10	16.0	11.5	16.0	13.5	21.5	18.0	25.0	24.0	23.0	21.5	24.5	22.0
11	15.5	13.5	17.5	13.5	22.5	19.0	23.5	21.5	21.5	20.5	24.5	22.5
12	16.0	12.0	17.0	15.5	22.5	21.0	23.5	20.0	22.0	20.5	24.0	22.0
13	16.0	13.0	16.5	14.5	21.0	18.0	23.0	20.5	23.5	21.5	24.0	22.5
14	15.0	11.5	14.5	11.0	19.0	16.5	24.5	21.5	24.0	22.0	23.5	22.5
15	15.0	11.5	11.0	10.5	19.0	17.0	23.5	22.5	25.0	22.5	24.5	21.0
16	13.5	11.0	12.5	11.0	21.0	17.5	24.5	22.0	24.5	23.0	22.5	21.0
17	14.5	10.0	14.0	11.5	23.0	19.5	24.0	21.0	25.0	22.0	23.0	20.5
18	14.5	11.5	17.0	13.5	24.5	21.5	24.0	21.0	25.5	23.0	24.5	21.5
19	13.0	11.5	20.0	16.0	25.0	20.5	25.0	21.5	26.5	23.0	25.5	22.0
20	11.5	9.0	21.0	17.5	23.5	22.0	26.0	23.5	24.5	22.0	25.5	22.5
21	9.0	8.0	20.0	17.0	23.5	21.0	27.0	24.0	24.0	20.0	25.5	23.0
22	11.5	7.0	17.0	15.0	23.0	21.0	28.0	24.5	24.0	19.5	23.5	18.5
23	10.5	10.0	18.0	16.0	22.0	19.5	27.5	24.5	24.5	19.5	20.5	16.0
24	13.0	9.0	17.5	16.5	23.5	20.0	25.0	23.5	26.0	21.0	20.5	17.5
25	12.5	10.5	20.0	16.0	24.0	21.0	24.0	23.0	26.0	22.5	20.5	16.0
26	12.0	9.5	21.0	17.5	25.5	22.0	26.0	22.5	25.0	23.0	19.0	14.0
27	14.0	10.0	22.0	18.5	27.5	24.0	25.5	23.5	26.0	22.5	19.0	14.0
28	15.5	11.0	22.5	19.0	27.0	24.5	26.0	22.5	26.5	22.5	18.5	15.0
29	15.5	12.5	23.0	19.5	27.0	24.5	25.5	22.0	25.0	23.0	18.0	13.0
30	16.5	13.5	23.0	20.5	27.5	24.5	24.0	21.5	23.5	21.5	18.5	14.0
31	---	---	23.0	20.5	---	---	23.0	21.0	21.0	19.0	---	---
MONTH	16.5	7.0	23.0	10.5	27.5	16.5	28.0	19.5	26.5	19.0	25.5	13.0
YEAR	28.0	.0										

03232300 RATTLESNAKE CREEK NEAR CENTERFIELD, OH

LOCATION.--Lat 39°19'44", long 83°28'32", Highland County, Hydrologic Unit 05060003, on right bank 600 ft (183 m) upstream from county road bridge at Centerfield, 0.6 mi (1.0 km) upstream from Walnut Creek, 1.5 mi (2.4 km) downstream from Lees Creek, and 2.4 mi (3.9 km) southeast of East Monroe.

DRAINAGE AREA.--209 mi² (541 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water stage recorder. Datum of gage is 822.32 ft (250.643 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--7 years, 233 ft³/s (6.60 m³/s), 15.18 in/yr (385 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,370 ft³/s (209 m³/s) Feb. 24, 1975, gage height, 12.97 ft (3.953 m); minimum, 1.9 ft³/s (0.054 m³/s) Aug. 22-24, 1972, Sept. 24-26, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft³/s (56.6 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 14	1130	2860	81.0	7.79	2.374	Mar. 21	1900	3180	40.1	8.21	2.502
Jan. 8	1645	2540	71.9	7.35	2.240	Mar. 26	0100	3020	85.5	8.00	2.438
Mar. 15	---	*6600	187	*a							

Minimum discharge, 2.1 ft³/s (0.059 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	28	1010	80	680	60	298	175	106	38	21	636
2	263	26	969	74	580	60	240	153	89	96	19	390
3	210	25	662	70	500	59	193	138	80	373	15	218
4	114	24	566	66	440	58	178	146	72	490	12	132
5	72	22	1600	64	390	58	170	156	65	281	9.7	86
6	54	21	1570	64	350	57	156	134	60	173	22	58
7	44	23	1030	70	310	56	161	110	62	117	132	43
8	48	24	628	1300	280	56	148	161	132	84	100	32
9	103	24	478	1270	250	58	141	335	387	65	66	25
10	105	24	341	640	220	69	136	332	302	54	499	20
11	76	22	299	500	195	98	138	233	192	46	763	17
12	62	21	252	360	160	473	129	196	138	38	526	15
13	48	18	308	240	140	1600	113	782	117	32	292	14
14	39	16	1960	180	120	4500	94	1050	96	32	177	13
15	34	15	2080	150	110	5600	81	907	76	38	107	12
16	31	16	1550	140	100	3800	73	670	67	50	71	16
17	27	62	914	130	94	2600	71	523	62	34	53	34
18	25	92	662	120	88	1900	89	431	96	26	39	65
19	25	70	530	110	84	1600	161	342	231	21	29	32
20	23	55	437	100	80	1400	216	281	154	18	35	21
21	21	92	362	90	76	1200	285	253	270	16	25	16
22	19	182	279	80	72	1100	236	213	143	14	18	13
23	17	165	213	75	68	1000	193	240	109	12	15	11
24	16	122	180	72	66	950	190	352	76	21	13	10
25	16	94	168	110	64	900	328	237	62	28	12	8.9
26	29	82	140	850	62	1950	588	192	60	21	10	6.4
27	45	63	130	1200	62	1400	405	163	54	21	9.6	5.4
28	45	57	120	1300	60	954	295	143	50	16	9.4	5.0
29	42	49	110	1100	---	552	233	132	51	13	12	4.6
30	36	127	100	900	---	401	203	122	44	13	24	4.6
31	31	---	90	780	---	342	---	127	---	21	382	---
TOTAL	1818	1661	19730	12285	5090	34451	5922	9429	3503	2302	3517.7	1963.9
MEAN	58.6	55.4	636	396	203	1127	197	304	117	74.3	113	65.5
MAX	263	182	2080	1300	680	5600	588	1050	387	490	763	636
MIN	16	15	90	64	60	56	71	110	44	12	9.4	4.6
CFSM	.28	.27	3.04	1.90	.97	5.39	.94	1.45	.56	.36	.54	.31
IN.	.32	.30	3.51	2.19	1.01	6.22	1.05	1.68	.62	.41	.63	.35

CAL YR 1977 TOTAL 49440.6 MEAN 135 MAX 2040 MIN 1.6 CFSM .65 IN 8.80
WTR YR 1978 TOTAL 102770.6 MEAN 282 MAX 5600 MIN 4.6 CFSM 1.35 IN 18.29

a Maximum gage height unknown. May have been higher Mar. 18-20 during backwater from Paint Creek Lake.

03232300 RATTLESNAKE CREEK NEAR CENTERFIELD, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1973 to September 1978 (Discontinued).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: June 1974 to September 1978 (Discontinued).

INSTRUMENTATION.--Water temperature recorder.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 28.5 °C July 7, 1977; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 28.0°C July 22, 23; minimum, 0.0°C on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.5	17.0	14.5	12.5	8.0	5.0	1.0	.0	.0	.0	1.0	.0
2	18.5	16.0	14.5	12.0	7.0	6.0	.0	.0	.0	.0	.0	.0
3	15.5	14.0	16.0	14.0	6.5	5.5	.5	.0	.0	.0	.0	.0
4	15.0	12.0	16.5	15.5	6.5	5.0	.0	.0	.0	.0	.5	.0
5	14.5	12.5	18.0	16.5	6.0	4.0	.5	.0	.0	.0	.0	.0
6	16.0	14.0	18.0	17.0	4.5	.5	1.0	.5	.0	.0	1.0	.0
7	14.5	12.0	17.5	16.5	.5	.0	1.0	.5	.0	.0	1.0	.0
8	14.0	12.5	17.5	16.0	.0	.0	3.0	.5	.0	.0	.5	.0
9	14.0	12.0	18.0	16.0	1.0	.0	1.0	.0	.0	.0	1.5	.0
10	13.0	11.0	17.5	11.0	.0	.0	.0	.0	.0	.0	2.0	.0
11	13.0	11.0	11.0	9.0	.0	.0	.0	.0	.0	.0	1.5	.0
12	11.0	10.0	8.5	6.0	.0	.0	.0	.0	.0	.0	.0	.0
13	11.5	10.0	6.0	4.0	1.0	.5	.0	.0	.0	.0	.0	.0
14	12.5	10.0	6.0	4.5	5.5	1.5	.0	.0	.0	.0	.0	.0
15	12.5	10.0	8.0	5.0	5.0	3.5	.0	.0	.0	.0	.5	.0
16	12.0	10.0	9.5	8.0	5.0	3.0	.0	.0	.0	.0	.5	.0
17	10.5	8.5	9.5	8.5	6.5	4.5	.0	.0	.0	.0	1.0	.0
18	12.0	9.5	8.5	6.0	7.5	6.5	.0	.0	.0	.0	1.5	.0
19	11.5	10.5	6.5	5.0	7.0	6.5	.0	.0	.0	.0	2.0	.5
20	11.5	9.0	8.0	6.0	6.5	5.0	.0	.0	.0	.0	4.0	.5
21	12.0	9.0	9.0	8.0	5.0	2.0	.0	.0	.0	.0	5.0	3.0
22	13.0	10.0	8.5	7.0	2.0	1.0	.0	.0	.0	.0	6.5	3.0
23	14.5	12.0	8.5	7.0	2.0	.5	.0	.0	.0	.0	7.5	6.5
24	14.5	11.5	8.5	7.0	4.5	1.5	.0	.0	.0	.0	6.0	4.0
25	14.0	13.0	7.0	5.5	4.5	.5	.0	.0	.5	.0	6.0	3.5
26	15.0	13.5	5.0	1.5	.0	.0	.0	.0	.5	.0	6.0	5.5
27	15.0	14.0	1.0	.0	.0	.0	.0	.0	.5	.0	5.5	4.5
28	14.0	13.0	2.0	.5	.0	.0	.0	.0	1.0	.0	8.0	4.0
29	13.0	11.0	2.0	1.0	.0	.0	.0	.0	---	---	10.0	6.5
30	12.5	10.0	5.0	2.0	.5	.0	.0	.0	---	---	10.0	6.0
31	13.0	10.5	---	---	1.0	.5	.0	.0	---	---	12.0	7.0
MONTH	19.5	8.5	18.0	.0	8.0	.0	3.0	.0	1.0	.0	12.0	.0

03232300 RATTLESNAKE CREEK NEAR CENTERFIELD, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	14.5	10.0	15.0	11.5			---	---	24.0	21.0		
2	13.0	10.5	15.5	11.0			---	---	25.5	22.0		
3	12.0	9.0	15.5	11.0			---	---	25.5	24.0		
4	13.5	11.0	14.0	11.0			---	---	25.0	22.0		
5	14.0	11.0	11.5	10.5			---	---	23.0	21.0		
6	13.5	12.0	12.0	10.0			---	---	23.0	20.5		
7	16.0	11.5	11.5	10.0			---	---	23.5	21.5		
8	14.0	12.5	13.5	11.0			---	---	24.0	20.5		
9	13.5	10.5	16.0	13.0			---	---	24.5	21.5		
10	16.5	11.5	16.0	13.0			---	---	24.0	20.0		
11	16.0	14.0	17.5	13.0			---	---	21.5	20.5		
12	16.0	11.5	17.0	16.0			---	---	22.5	20.0		
13	16.0	13.0	16.0	14.5			---	---	23.5	21.0		
14	15.0	11.0	14.0	10.5			---	---	24.5	22.5		
15	15.5	11.5	11.0	10.5			---	---	25.5	22.5		
16	13.5	11.0	12.5	11.0			---	---	---	---		
17	14.5	9.5	15.0	11.0			---	---	---	---		
18	14.0	11.0	18.0	13.0			25.0	23.5	---	---		
19	13.0	11.5	20.0	15.5			26.0	22.5	---	---		
20	11.5	8.5	21.0	17.5			27.0	24.0	---	---		
21	8.5	7.0	---	---			27.5	25.0	---	---		
22	11.5	6.0	---	---			28.0	25.0	---	---		
23	10.5	9.5	---	---			28.0	25.5	---	---		
24	13.0	9.0	---	---			26.0	24.5	---	---		
25	13.0	10.0	---	---			24.5	23.5	---	---		
26	11.5	8.5	---	---			26.0	23.0	---	---		
27	14.5	8.5	---	---			26.0	24.5	---	---		
28	15.5	10.0	---	---			26.5	23.0	---	---		
29	15.0	12.0	---	---			25.5	23.0	---	---		
30	16.0	13.0	---	---			24.5	22.0	---	---		
31	---	---	---	---			24.0	21.5	---	---		
MONTH	16.5	6.0	21.0	10.0			28.0	21.5	29.5	20.0		
YEAR	28.0	.0										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03232470 PAINT CREEK BELOW PAINT CREEK DAM, NEAR BAINBRIDGE, OH

LOCATION.--Lat 39°15'08", long 83°20'58", Highland County, Hydrologic Unit 05060003, on right bank, 400 ft (122 m) downstream from Paint Creek dam, 700 ft (213 m) upstream from Cliff Creek, and 4.5 mi (7.2 km) northwest of Bainbridge.

DRAINAGE AREA.--570 mi² (1,476 km²).

PERIOD OF RECORD.-- Water years 1962-67, (occasional low-flow measurements), water years 1963-67 (annual maximums). Published as "at damsite near Bainbridge" 1963-67.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft (213.360 m) National Geodetic Vertical Datum of 1929. (levels by Corps of Engineers). Prior to May 3, 1968, water-stage recorder and crest-stage gage at partial-record site 1,000 ft (305 m) downstream at datum 42.96 ft (13.094 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Paint Creek Lake (see station 03232460). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--11 years, 545 ft³/s (15.43 m³/s)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 45,000 ft³/s (1,270 m³/s) Mar. 10, 1964, gage height, 27.3 ft (8.32 m), site and datum then in use; minimum daily, 4.7 ft³/s (0.13 m³/s) Sept. 1, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,810 ft³/s (221 m³/s) Mar. 19, gage height, 54.89 ft (16.73 m); minimum daily, 11 ft³/s (0.31 m³/s (0.31 m³/s) July 31, Aug. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	222	703	296	1230	128	6700	373	218	146	11	782
2	55	222	1580	287	1190	165	6380	321	162	224	23	828
3	286	181	1290	220	1150	194	3580	297	331	603	54	525
4	457	132	1270	196	749	172	1000	283	250	829	62	288
5	364	118	1900	194	495	135	569	358	282	561	63	141
6	164	117	2660	194	408	130	498	337	280	229	62	105
7	101	181	2630	194	371	135	492	253	195	150	115	105
8	101	219	2430	1600	327	127	286	232	190	152	160	105
9	99	219	1530	2730	304	148	396	574	463	152	226	105
10	99	218	875	2140	290	148	497	743	766	209	581	65
11	99	216	324	1090	268	163	338	445	576	170	1240	44
12	99	216	478	1020	251	309	310	508	426	119	767	44
13	99	222	707	669	213	1370	318	808	344	146	382	46
14	99	178	2220	540	199	959	286	1960	243	99	337	50
15	100	152	4540	530	163	20	236	1960	208	120	130	51
16	101	128	4260	450	148	22	224	1700	201	142	48	51
17	101	165	2300	345	172	22	185	1450	199	142	78	49
18	101	298	1560	280	182	2070	169	921	201	143	80	88
19	101	328	1250	253	182	6250	294	947	217	99	81	102
20	101	321	1040	297	182	6740	406	599	227	47	82	102
21	101	416	978	304	182	5810	525	632	530	31	82	102
22	101	608	734	293	182	4330	559	509	517	31	82	73
23	101	574	540	278	182	6520	535	428	400	31	82	22
24	102	516	472	260	155	6770	444	830	216	31	58	22
25	148	381	500	261	169	6290	391	673	156	63	47	46
26	214	328	422	493	189	765	612	543	154	79	47	60
27	259	305	360	815	143	1170	1160	442	148	79	46	60
28	304	209	261	830	128	2570	985	357	148	79	46	60
29	302	222	198	1330	---	3500	561	297	148	53	46	60
30	300	197	271	1360	---	6330	453	276	148	21	46	60
31	250	---	295	1190	---	6810	---	268	---	11	243	---
TOTAL	4964	7809	40578	20947	9824	70264	29389	20324	8384	4991	5379	4241
MEAN	160	260	1309	676	351	2267	980	656	279	161	174	141
MAX	457	608	4540	2730	1230	6810	6700	1960	766	829	1240	828
MIN	55	117	198	194	128	20	169	232	148	11	11	22

CAL YR 1977 TOTAL 114956.1 MEAN 315 MAX 4540 MIN 9.3
WTR YR 1978 TOTAL 227094.0 MEAN 622 MAX 6810 MIN 11

03232500 ROCKY FORK NEAR BARRETTS MILLS, OH

LOCATION.--Lat 39°13'06", long 83°23'08", Highland County, Hydrologic Unit 05060003, on left bank at downstream side of highway bridge, 1.1 mi (1.8 km) north of Barretts Mills, 2 mi (3 km) east of Rainsboro, 2.8 mi (4.5 km) upstream from mouth, and 6 mi (10 km) downstream from Rocky Fork Lake.

DRAINAGE AREA.--140 mi² (363 km²).

PERIOD OF RECORD.--October 1939 to current year.

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 770.8 ft (234.94 m) National Geodetic Vertical Datum of 1929, (levels by Corps of Engineers). Prior to Feb. 15, 1940, nonrecording gage at same site and datum.

REMARKS.--Records good except those for periods of no gage-height record, and winter period which are fair. Some diurnal fluctuation caused by mill 6 mi (10 km) upstream from station. Flow regulated by Rocky Fork Lake 6 mi (10 km) upstream, since 1952, capacity, 38,100 acre-ft (42.0 hm³). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--39 years, 152 ft³/s (4.30 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,400 ft³/s (379 m³/s) Mar. 10, 1964 from rating curve extended above 8,800 ft³/s (249 m³/s) on basis of velocity-area studies; maximum gage height, 15.56 ft (4.743 m) Mar. 6, 1985; minimum daily discharge, 0.90 ft³/s (0.025 m³/s) Sept. 10, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6380 ft³/s (18.1 m³/s) Mar. 14, gage height, 10.19 ft (3.106 m); minimum daily, 8.7 ft³/s (0.25 m³/s) Nov. 3, 4.

Note. No gage-height record Nov. 18 to Dec. 12, Jan. 6 to Feb. 2, May 18 to June 19, July 3-25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	272	9.9	430	110	290	62	240	158	64	49	36	125
2	352	8.9	360	110	230	60	197	141	58	88	38	94
3	234	8.7	330	110	190	60	182	127	56	130	35	73
4	155	8.7	460	100	170	58	171	145	75	160	33	56
5	111	9.4	820	100	150	58	163	176	60	100	32	43
6	93	14	700	100	140	56	158	165	54	70	34	35
7	72	37	580	100	130	56	185	147	52	56	91	31
8	80	46	480	350	120	54	174	244	56	45	61	28
9	97	48	390	699	110	54	156	435	120	39	50	25
10	86	53	300	480	100	54	150	369	200	48	124	23
11	75	47	220	352	92	60	150	294	160	43	112	22
12	60	34	190	279	86	276	142	247	120	37	99	22
13	47	29	258	240	80	464	130	347	92	32	81	21
14	41	26	817	212	77	4750	116	620	76	29	67	21
15	36	25	819	188	75	3320	107	450	60	27	59	26
16	35	44	548	169	73	1540	98	320	60	30	59	151
17	33	84	402	165	72	931	90	240	56	34	48	65
18	28	103	326	159	70	615	100	250	52	29	41	48
19	27	96	271	147	70	484	136	170	61	25	37	38
20	24	110	246	146	72	435	196	180	62	24	35	33
21	22	170	220	142	72	427	213	150	93	22	32	29
22	21	160	193	133	72	416	196	140	87	21	31	27
23	74	150	169	132	70	350	177	130	74	20	31	23
24	16	130	154	125	68	298	175	200	62	45	30	23
25	11	110	140	232	66	419	206	180	54	48	30	22
26	25	90	130	1010	64	1240	256	130	93	35	30	21
27	50	70	120	850	64	809	266	110	82	33	31	21
28	58	56	120	680	62	563	229	98	76	32	39	21
29	71	50	110	580	---	420	199	86	68	31	230	21
30	80	110	110	460	---	327	181	77	57	31	113	23
31	13	---	110	380	---	274	---	70	---	42	157	---
TOTAL	2391	1938.6	10523	9040	2935	19390	5159	6606	2340	1455	1926	1211
MEAN	77.1	64.6	339	292	105	625	172	213	78.0	46.9	62.1	40.4
MAX	352	170	820	1010	290	4750	286	620	200	160	230	151
MIN	11	8.7	110	100	62	54	90	70	52	20	30	21

CAL YR 1977 TOTAL 36310.6 MEAN 99.5 MAX 860 MIN 6.3
WTR YR 1978 TOTAL 64924.6 MEAN 178 MAX 4750 MIN 8.7

03234000 PAINT CREEK NEAR BOURNEVILLE, OH

LOCATION.--Lat 39°15'49", long 83°10'01", Ross County, Hydrologic Unit 05060003, on upstream side of left abutment of highway bridge, 0.2 mi (0.3 km) downstream from Sulfur Lick, 1.2 mi (1.9 km) southwest of Bourneville, and 1.2 mi (1.9 km) upstream from Upper Twin Creek.

DRAINAGE AREA.--807 mi² (2,090 km²).

PERIOD OF RECORD.--October 1921 to January 1937, January 1938 to current year. Monthly discharge only for some periods, published in WSP 1305. Published as "at Bainbridge" October 1921 to September 1923 and as "near Bainbridge" January 1938 to May 1939.

REVISED RECORDS.--WRD Ohio 1972: 1971.

GAGE.--Water-stage recorder. Datum of gage is 665.56 ft (202.863 m) National Geodetic Vertical Datum of 1929. See WSP 1725 for history of changes prior to May 3, 1939.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by Paint Creek Lake 17 mi (27.4 km) upstream since 1971, capacity 145,000 acre-ft (179 hm³) and Rocky Fork Lake 23 mi (37 km) upstream since 1952, capacity, 34,100 acre-ft (42.0 hm³). Water-quality data collected at this site 1965 to 1977. Sediment data 1956 to 1962.

AVERAGE DISCHARGE.--55 years (1921-36, 1939-78), 790 ft³/s (22.4 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 56,900 ft³/s (1,610 m³/s) Mar. 10, 1964, gage height, 20.50 ft (6.248 m), from rating curve extended above 30,000 ft³/s (736 m³/s) on basis of contracted-opening measurement at gage height 20.08 ft (6.120 m); minimum daily, 5 ft³/s (0.1 m³/s) Oct. 29, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,800 ft³/s (306 m³/s) Mar. 14, gage height, 11.05 ft (3.368 m); minimum daily, 47 ft³/s (1.33 m³/s) Aug. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	136	257	1170	502	1400	230	7220	806	464	220	53	953
2	371	251	2570	475	1200	230	7100	668	313	284	47	1290
3	390	240	2040	423	1100	230	5400	599	411	730	55	913
4	701	186	1920	363	1000	230	2030	668	477	1170	77	559
5	641	149	3870	359	800	230	1290	837	322	1010	83	291
6	367	147	4740	355	620	230	1040	776	308	484	93	172
7	207	172	4020	363	520	230	1070	609	316	249	125	156
8	189	272	3540	2080	420	230	907	800	326	231	202	147
9	201	278	2780	4220	360	230	723	1530	803	219	214	140
10	201	281	1820	3550	340	260	933	1690	1200	235	430	132
11	186	275	837	2260	330	300	849	1150	1050	254	1660	85
12	176	266	849	1770	320	1140	701	1060	774	185	1350	78
13	167	257	1200	1280	310	2520	646	1590	596	170	788	76
14	158	240	3220	820	300	8570	630	2940	464	170	448	75
15	153	184	6210	750	290	4940	520	3430	341	130	419	75
16	153	186	5680	620	280	2620	461	2830	316	169	147	149
17	149	201	3630	520	280	1640	436	3100	304	167	122	209
18	142	341	2490	460	270	2180	440	2050	297	165	132	111
19	142	406	1980	410	270	6920	830	1940	311	157	130	136
20	140	386	1670	390	270	7610	987	1380	330	105	126	130
21	136	516	1550	380	270	7380	1100	1370	563	73	118	126
22	134	973	1290	370	260	5190	1120	1210	839	63	115	122
23	160	894	1000	360	260	7120	1060	990	618	60	113	82
24	174	843	776	420	250	7420	960	1500	441	65	109	60
25	138	630	830	560	250	7530	940	1520	256	80	89	56
26	207	516	735	2690	240	5140	1220	1050	270	98	84	73
27	278	457	630	2500	240	2330	1780	928	265	97	82	76
28	367	320	544	2200	230	4110	1810	749	250	95	84	76
29	398	310	386	2000	---	4040	1170	622	241	92	209	75
30	549	363	427	1800	---	6840	953	541	229	71	176	84
31	359	---	488	1600	---	7330	---	500	---	61	245	---
TOTAL	7870	10797	64892	36850	12680	105200	46326	41433	13695	7359	8125	6707
MEAN	254	360	2093	1189	453	3394	1544	1337	457	237	262	224
MAX	701	973	6210	4220	1400	8570	7220	3430	1200	1170	1660	1290
MIN	134	147	386	355	230	230	436	500	229	60	47	56

CAL YR 1977 TOTAL 188285 MEAN 516 MAX 6210 MIN 30
WTR YR 1978 TOTAL 361934 MEAN 992 MAX 8570 MIN 47

03238500 SCIOTO RIVER AT HIGBY, OH
(National stream quality accounting network station)

LOCATION.--Lat 39°12'44", long 82°51'50", in sec. 6, T.7 N., R.20 W., Ross County, Hydrologic Unit 05060002, on left bank at downstream side of highway bridge, 0.8 mi (1.3 km) downstream from Walnut Creek, 1.2 mi (1.9 km) north of Higby, 3 mi (5 km) northwest of Richmondale and 5.0 mi (8.0 km) upstream from Salt Creek.

DRAINAGE AREA.--5,131 mi² (13,289 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 893: 1937(M). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 567.28 ft (172.907 m) National Geodetic Vertical Datum of 1929. prior to Nov. 7, 1930, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow slightly regulated by 7 reservoirs 45 mi (72 km) to 105 mi (169 km) upstream from station. See stations 03220500, 03221500, 03225000, 03228400, 03228805, 03230890, 03232460, and since 1952 by Rocky Fork Lake 51 mi (82 km) upstream, capacity, 34,100 acre-ft (42.0 hm³).

AVERAGE DISCHARGE.--48 years, 4,491 ft³/s (127 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 177,000 ft³/s (5,010 m³/s Jan. 23, 1937, from rating curve extended above 112,000 ft³/s (3,170 m³/s); maximum gage height, 26.4 ft (8.05 m) Jan. 23, 1937, from floodmarks, and Jan. 23, 1959; minimum daily discharge, 244 ft³/s (6.91 m³/s) Oct. 23, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--A stage of 31.6 ft (9.63 m) occurred Mar. 28, 1913, and has not been exceeded since.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 45,500 ft³/s (1290 m³/s) Mar. 15, gage height, 17.98 ft (5.480 m); minimum daily, 782 ft³/s (22.1 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1260	1170	4420	3310	8570	1840	22300	4560	4360	1790	1080	5450
2	4000	1110	11500	3160	7940	1790	21800	4090	3440	2150	1010	4040
3	6110	1130	10000	2900	6830	1840	19700	3700	3090	2700	959	2600
4	3770	1110	8410	2470	6580	1870	15200	4050	3040	3180	959	1990
5	2870	1070	11300	2380	5490	1790	11900	4600	2750	3070	1030	1610
6	2460	1060	18400	2330	4580	1750	10500	4800	2440	2440	1180	1460
7	2310	1070	17500	2330	4090	1750	11100	3880	2330	2230	2180	1280
8	2230	1130	11400	5940	3720	1810	13900	4380	2510	2100	3230	1240
9	2330	1330	9010	19100	3440	1790	12800	7300	5880	1920	2010	1130
10	2970	1230	6630	17200	3130	1950	10100	7710	5800	1760	1630	1100
11	2990	1200	4990	11200	2870	2490	8030	5340	4200	1660	2720	1040
12	2380	1210	4180	8500	2840	5620	6550	4200	3380	1550	3350	945
13	1930	1210	3930	6810	2700	11100	5740	6630	2940	1430	3140	931
14	1780	1160	8280	5490	2640	29800	5020	10600	2690	1420	2960	959
15	1630	1100	21600	4580	2520	44200	4430	13100	2280	1490	2030	945
16	1520	1030	26600	3880	2430	40400	3950	13000	2090	1340	1990	972
17	1420	1070	29000	3540	2280	39800	3650	13500	2060	1310	1610	1140
18	1340	1700	27600	3190	2230	34400	3750	11600	2040	1280	1790	1080
19	1260	1920	23700	2970	2140	32900	6000	9310	2300	1210	1450	1030
20	1200	1670	21000	2850	2030	31800	8950	7360	5450	1160	1310	1010
21	1160	1640	18500	2870	2060	31400	10500	6770	5730	1080	1270	1000
22	1110	3450	13700	2720	2010	30600	12100	6060	4040	1010	1210	931
23	1080	3580	9300	2540	1920	31300	12000	5210	3490	986	1110	904
24	1270	2940	6930	2540	1960	33100	11200	5120	2960	1000	1060	890
25	1200	2460	5710	3130	1900	32900	11100	7200	2380	1240	1030	822
26	1080	2070	6200	10600	1920	40600	11500	8990	2060	1300	959	822
27	1130	1930	7960	13500	1890	33600	10700	9420	2120	1270	945	822
28	1240	1790	6210	12100	1820	34100	8070	8050	1920	1160	945	809
29	1260	1670	4860	11100	---	31600	6490	5320	2070	1080	1390	782
30	1300	1700	3950	10500	---	25200	5270	4160	1930	1100	1820	795
31	1340	---	3590	8970	---	22400	---	4290	---	1130	1950	---
TOTAL	60930	47910	366360	194700	94530	637490	304310	214300	93770	49546	51307	40529
MEAN	1965	1597	11820	6281	3376	20560	10140	6913	3126	1598	1655	1351
MAX	6110	3580	29000	19100	8570	44200	22300	13500	5880	3180	3350	5450
MIN	1080	1030	3590	2330	1820	1750	3650	3700	1920	986	945	782

CAL YR 1977 TOTAL 1272319 MEAN 3486 MAX 29000 MIN 570
WTR YR 1978 TOTAL 2155682 MEAN 5906 MAX 44200 MIN 782

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: March 1967 to current year.
pH: March 1967 to current year.
WATER TEMPERATURES: October 1953 to current year.
DISSOLVED OXYGEN: March 1967 to current year.
SUSPENDED SEDIMENT DISCHARGE: Water years 1954-74 (daily), 1975 to current year (periodic).

INSTRUMENTATION.--Water-quality monitor since March 1967.

REMARKS.--Samples were collected each month as part of the National Stream Quality Accounting Network. Interruptions in the water-quality record were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,060 micromhos Feb. 10, 1977; minimum, 113 micromhos Sept. 16, 1975.
pH: Maximum, 9.2 units May 28, June 4, 1977; minimum, 6.7 units Mar. 5, 1973, Jan. 4, 1977, Jan. 26, 1978.
WATER TEMPERATURES: Maximum, 34.0°C June 29, 1966; minimum, 0.0°C on many days during winter periods.
DISSOLVED OXYGEN: Maximum, 15.0 mg/L or higher on several days during 1971, 1972, 1976-77; minimum, 0.0 mg/L on many days during 1968, Sept. 13, 1969.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,520 mg/L June 23, 1954; minimum daily mean, 1 mg/L on several days during 1955-56.
SEDIMENT LOADS: Maximum daily, 550,000 tons (499,000 tonnes) Jan. 23, 1959; minimum daily, 0.82 ton (0.74 tonne) Sept. 8, 1955.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 873 micromhos Mar. 6, 7; minimum, 234 micromhos Mar. 15.
pH: Maximum, 9.0 units Aug. 4, June 4; minimum, 6.7 units Jan. 26.
WATER TEMPERATURES: Maximum, 28.5°C July 22; minimum, 0.0°C many days during winter period.
DISSOLVED OXYGEN: Maximum, 14.9 mg/L Aug. 4; minimum, 4.2 mg/L June 20.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT												
19...	1130	805	7.6	11.5	15	--	8.7	79	--	--	550	440
NOV												
28...	1300	720	7.8	3.0	20	--	11.3	84	--	--	1100	340
DEC												
08...	1145	555	7.8	1.0	50	--	12.4	87	--	--	7100	27000
JAN												
04...	1140	749	7.7	.5	20	--	11.4	89	--	--	820	330
FEB												
08...	1120	653	7.9	.0	20	--	12.4	84	--	--	520	210
MAR												
07...	1115	842	7.8	4.5	10	--	11.4	88	--	--	2500	150
APR												
05...	1215	494	7.9	9.0	50	--	10.4	90	30	--	1700	440
MAY												
09...	1700	480	7.9	14.5	55	--	9.0	87	30	--	5100	3500
JUN												
07...	1435	645	8.0	21.5	20	--	7.4	89	30	--	270	330
JUL												
11...	1530	720	8.1	24.5	--	30	7.4	88	44	--	1200	K80
AUG												
09...	1230	548	7.7	23.0	--	45	6.8	78	--	62	K3100	K900
SEP												
13...	1300	780	8.3	25.5	--	15	6.2	75	--	45	K370	2300

03239500 SCIOTO RIVER AT NIGBY, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT												
19...	320	110	77	30	37	4.5	250	0	210	10	110	52
NOV												
28...	300	80	72	29	36	4.4	260	0	210	8.6	100	42
DEC												
08...	260	110	64	24	18	3.8	180	0	150	4.6	89	36
JAN												
04...	340	130	87	30	24	3.4	260	0	210	8.3	98	41
FEB												
08...	310	110	80	27	26	3.0	250	0	210	5.0	90	39
MAR												
07...	340	110	86	31	30	3.6	280	0	230	7.1	120	39
APR												
05...	210	67	53	18	13	2.6	170	0	140	3.4	52	23
MAY												
09...	230	80	57	22	15	2.7	180	0	150	3.6	77	24
JUN												
07...	300	84	73	28	24	3.2	260	0	210	4.2	90	35
JUL												
11...	320	99	80	24	24	3.6	--	--	220	--	87	42
AUG												
09...	230	84	54	21	21	4.2	--	--	150	--	76	37
SEP												
13...	310	75	74	27	35	5.3	--	--	230	--	120	45

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M
OCT												
19...	.4	7.7	461	442	--	--	--	--	.39	7.2	--	--
NOV												
28...	.4	5.5	434	418	--	--	--	--	.53	--	2800	15.2
DEC												
08...	.3	8.1	372	310	--	--	--	--	.30	15	--	--
JAN												
04...	.3	8.4	483	420	--	--	--	--	.43	--	--	--
FEB												
08...	.2	7.7	385	346	.98	1.5	5.4	24	.28	5.4	--	--
MAR												
07...	.4	6.5	539	445	1.1	2.8	5.4	26	.54	4.6	180	--
APR												
05...	.2	5.1	281	252	1.7	1.4	5.5	23	.23	--	--	5.51
MAY												
09...	.2	5.4	341	291	1.1	1.3	4.0	18	.42	11	2300	6.93
JUN												
07...	.3	5.5	446	387	.83	.87	4.6	20	.37	10	3300	--
JUL												
11...	.4	5.4	456	410	1.4	1.4	4.8	21	.55	--	--	--
AUG												
09...	.3	5.3	414	321	1.4	1.5	4.4	19	.47	4.5	--	--
SEP												
13...	.4	5.3	329	475	1.2	1.3	3.0	13	.82	5.2	--	--

SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

ANALYSES OF MINOR ELEMENTS

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
NOV												
28...	1300	<	2	<	2	<10	<	3	3	7	6	660
JAN												
09...	1140	<	1	0	0	20	0	0	0	8	4	750
APR												
05...	1215	<	1	0	0	10	2	0	0	10	4	2800
JUL												
11...	1530	<	<	<	<	10	1	0	0	8	6	1300

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV											
28...	30	20	0	70	40	<.5	<.5	0	0	110	90
JAN											
09...	60	17	3	60	50	<.5	<.5	1	1	50	30
APR											
05...	60	4	0	70	30	<.5	<.5	0	0	40	10
JUL											
11...	30	17	14	90	30	.5	.5	0	0	30	10

SUSPENDED SEDIMENT DISCHARGE

PERIOD OF RECORD.--Water years 1958-74 (daily mean concentration and discharge), 1975 to current year (periodic instantaneous concentration and discharge).

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT					
19...	1130	1200	11.5	17	58
NOV					
28...	1300	1780	3.0	22	10[illegible]
DEC					
08...	1145	11200	1.0	78	2360
JAN					
09...	1140	2340	.5	19	120
FEB					
08...	1120	3660	.0	32	316
MAR					
07...	1115	1750	4.5	42	198
APR					
05...	1215	1170	9.0	82	2590
MAY					
09...	1700	6740	14.5	144	2620
JUN					
07...	1435	2330	21.5	39	245
JUL					
11...	1530	1640	24.5	72	319
AUG					
09...	1230	1930	23.0	106	552
SEP					
13...	1300	917	25.5	38	94

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	732	657	773	752	710	549	---	---	593	567	849	839
2	770	621	806	774	711	524	---	---	576	569	849	828
3	642	422	812	804	585	522	---	---	588	569	828	818
4	501	470	825	804	627	585	---	---	597	581	839	825
5	542	501	831	825	630	345	---	---	593	562	866	837
6	572	539	839	831	495	446	---	---	615	581	873	852
7	605	573	834	824	488	473	---	---	642	618	873	842
8	644	606	848	827	555	500	---	---	663	642	---	---
9	654	633	825	816	579	545	---	---	678	654	---	---
10	674	626	825	800	594	576	---	---	---	---	825	728
11	669	620	810	779	639	593	---	---	---	---	744	609
12	648	626	810	761	666	636	---	---	---	---	599	380
13	672	648	777	753	669	594	---	---	---	---	566	365
14	698	669	771	747	549	404	---	---	---	---	388	251
15	719	699	797	768	554	470	---	---	---	---	287	234
16	753	720	812	780	464	422	681	675	---	---	354	268
17	---	---	800	782	477	450	695	681	---	---	383	345
18	---	---	818	779	452	423	698	692	---	---	342	321
19	---	---	807	801	428	419	708	692	---	---	335	326
20	---	---	---	---	437	420	719	704	---	---	339	323
21	---	---	---	---	479	437	720	713	---	---	326	318
22	---	---	704	650	524	482	737	717	836	819	336	320
23	---	---	713	587	546	521	759	728	834	819	330	324
24	---	---	623	594	572	545	746	723	827	816	335	327
25	831	818	662	626	609	573	722	518	839	827	342	315
26	837	828	678	662	627	585	485	242	831	824	306	264
27	837	824	669	680	630	582	573	431	830	821	347	300
28	827	770	725	699	---	---	537	506	845	822	363	347
29	767	753	737	726	---	---	530	507	---	---	411	365
30	765	747	735	714	---	---	543	530	---	---	420	410
31	746	729	---	---	---	---	563	543	---	---	414	408
MONTH	837	422	848	587	711	348	759	242	845	567	873	234

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	410	399	629	612	609	573	729	687	734	711	603	411
2	422	405	636	627	635	602	684	644	755	735	450	410
3	437	423	651	638	650	632	655	630	768	755	483	453
4	446	435	656	471	662	650	647	626	771	749	524	473
5	494	447	596	464	689	663	651	645	771	755	548	486
6	506	494	626	596	696	687	671	653	768	731	593	504
7	522	503	602	584	695	684	702	669	738	711	666	594
8	524	495	615	332	695	674	717	704	702	533	663	665
9	515	497	500	323	677	480	714	705	548	533	680	674
10	554	518	549	510	549	470	728	714	558	545	677	672
11	590	554	564	512	603	554	731	702	575	521	693	677
12	606	587	587	569	633	603	717	705	569	477	741	693
13	624	609	579	359	668	635	735	717	585	537	780	744
14	642	626	515	441	686	671	744	726	551	468	770	696
15	654	642	513	471	713	686	731	713	540	483	780	758
16	665	656	527	402	714	707	732	719	582	543	785	774
17	669	663	524	432	728	706	747	723	579	542	774	714
18	669	627	548	530	744	726	753	740	614	539	752	713
19	545	471	567	545	750	732	773	752	647	617	782	758
20	566	510	612	561	729	467	777	771	668	645	789	780
21	540	516	617	608	461	395	795	780	684	668	786	777
22	555	537	620	614	600	425	812	791	695	677	800	785
23	561	540	620	617	630	602	815	807	722	698	798	786
24	560	522	620	593	653	633	812	789	753	723	803	791
25	521	446	639	588	665	648	801	768	756	744	827	803
26	504	458	629	548	683	659	782	752	756	744	839	815
27	524	501	581	539	705	684	800	785	764	750	858	837
28	561	524	581	567	723	701	869	753	777	723	870	858
29	590	564	576	564	729	698	755	726	779	758	867	846
30	612	590	600	576	713	696	732	710	789	764	855	812
31	---	---	618	600	---	---	713	699	759	618	---	---
MONTH	669	399	656	323	750	395	869	626	789	468	870	410
YEAR	873	234										

SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.7	7.6	8.1	7.9	8.0	8.0	---	---	8.2	7.8	8.1	8.1
2	7.7	7.2	8.2	7.9	7.9	7.8	---	---	8.0	7.3	8.1	7.9
3	7.4	7.1	8.2	8.1	8.2	7.9	---	---	8.1	7.8	8.1	8.1
4	7.5	7.3	8.1	8.0	8.3	8.2	---	---	8.1	7.6	8.1	8.0
5	7.6	7.5	8.1	7.9	8.2	8.0	---	---	8.0	7.8	8.1	7.9
6	7.6	7.5	8.1	8.0	8.1	7.9	---	---	8.1	7.9	8.2	8.1
7	7.6	7.5	7.9	7.9	7.9	7.9	---	---	8.1	7.9	8.2	7.8
8	7.6	7.5	7.9	7.8	7.8	7.6	---	---	8.1	7.8	---	---
9	7.5	7.4	7.8	7.7	8.1	7.9	---	---	8.1	7.6	---	---
10	7.6	7.4	7.8	7.7	8.3	8.1	---	---	---	---	8.0	7.9
11	7.5	7.4	7.7	7.6	8.2	8.1	---	---	---	---	7.9	7.7
12	7.5	7.5	7.7	7.6	8.2	8.1	---	---	---	---	7.9	7.5
13	7.5	7.5	7.8	7.6	8.2	7.9	---	---	---	---	7.6	7.5
14	7.5	7.5	7.8	7.7	8.1	7.9	---	---	---	---	7.6	7.6
15	7.5	7.4	7.8	7.6	8.0	7.9	---	---	---	---	7.7	7.5
16	7.5	7.4	7.8	7.6	7.9	7.9	8.2	8.2	---	---	7.6	7.6
17	---	---	7.8	7.7	7.9	7.8	8.2	8.1	---	---	7.6	7.5
18	---	---	7.7	7.6	7.9	7.8	8.2	8.1	---	---	7.6	7.5
19	---	---	7.6	7.6	7.9	7.7	8.2	8.1	---	---	7.8	7.6
20	---	---	---	---	7.9	7.7	8.2	8.1	---	---	7.9	7.7
21	---	---	---	---	8.0	7.9	8.1	8.0	---	---	7.9	7.8
22	---	---	7.7	7.7	8.1	8.0	8.0	7.9	8.1	8.1	7.8	7.7
23	---	---	7.9	7.6	8.1	8.0	7.9	7.7	8.1	8.1	7.8	7.8
24	---	---	7.9	7.8	8.1	8.0	8.2	7.6	8.1	8.1	7.8	7.8
25	7.9	7.9	7.8	7.8	8.1	8.0	7.6	6.8	8.2	8.1	7.8	7.7
26	7.8	7.8	7.8	7.6	8.3	8.0	7.9	6.7	8.2	8.1	7.7	7.6
27	7.8	7.8	7.7	7.6	8.3	7.9	7.8	7.4	8.2	8.1	7.7	7.7
28	7.9	7.7	7.8	7.7	---	---	7.9	7.6	8.1	8.0	7.9	7.7
29	8.0	7.8	7.8	7.8	---	---	8.0	7.7	---	---	7.9	7.8
30	8.0	7.9	8.0	7.8	---	---	8.0	7.8	---	---	7.9	7.8
31	8.1	8.0	---	---	---	---	8.1	7.8	---	---	8.0	7.8
MONTH	8.1	7.1	8.2	7.6	8.3	7.6	8.2	6.7	8.2	7.3	8.2	7.5
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.0	8.0	8.0	7.9	8.0	7.9	8.3	8.1	8.6	8.1	7.8	7.6
2	8.0	8.0	8.1	7.9	8.0	7.9	8.3	7.9	8.6	8.1	7.7	7.6
3	8.0	7.9	8.1	7.9	8.0	7.9	8.0	7.9	8.7	8.2	8.0	7.6
4	8.1	8.0	8.1	7.9	8.0	7.9	7.9	7.8	9.0	8.3	8.0	7.9
5	8.0	7.9	7.9	7.9	8.1	8.0	7.9	7.9	8.8	8.6	8.1	7.9
6	8.1	7.9	7.9	7.9	8.1	8.0	8.0	7.9	8.5	8.2	8.2	8.0
7	8.1	8.0	7.9	7.9	8.1	8.0	8.0	7.9	8.3	7.8	8.3	8.0
8	8.1	8.0	7.9	7.8	8.2	8.1	8.0	7.9	7.8	7.6	8.3	8.1
9	8.1	8.0	8.0	7.7	8.1	7.8	8.0	7.9	7.8	7.6	8.4	8.2
10	8.2	8.0	8.0	7.9	7.9	7.7	8.1	8.0	7.8	7.7	8.5	8.1
11	8.2	8.1	8.2	8.0	8.0	7.9	8.3	8.0	7.8	7.8	8.6	8.2
12	8.2	8.0	8.2	8.1	8.1	8.0	8.5	8.1	7.8	7.7	8.6	8.2
13	8.2	8.1	8.1	7.9	8.1	8.0	8.5	8.3	7.8	7.7	8.5	8.2
14	8.2	8.0	8.0	7.9	8.1	8.0	8.6	8.2	7.7	7.6	8.4	8.2
15	8.2	8.0	8.0	7.9	8.1	8.0	8.5	8.3	7.8	7.7	8.4	8.1
16	8.1	8.0	8.0	8.0	8.2	8.1	8.6	8.3	7.9	7.8	8.3	8.1
17	8.2	8.0	8.1	8.0	8.3	8.1	8.7	8.3	7.9	7.8	8.1	8.0
18	8.2	8.1	8.2	8.0	8.3	8.1	8.8	8.5	7.9	7.8	8.2	8.0
19	8.1	8.0	8.2	8.1	8.4	8.1	8.7	8.4	8.0	7.9	8.2	8.0
20	8.1	7.9	8.2	8.1	8.3	7.8	8.7	8.3	8.1	7.8	8.2	8.0
21	8.0	7.9	8.2	8.2	7.9	7.7	8.7	8.4	8.2	7.9	8.4	8.1
22	8.2	8.0	8.3	8.1	8.1	7.9	8.5	8.2	8.2	7.9	8.2	8.1
23	8.2	8.1	8.2	7.9	8.1	8.0	8.4	8.1	8.4	8.0	8.4	8.0
24	8.1	7.9	8.0	7.9	8.1	8.0	8.3	8.1	8.4	8.1	8.4	8.1
25	8.0	7.9	7.9	7.9	8.1	8.1	8.2	8.1	8.4	8.1	8.4	8.1
26	8.0	7.9	8.0	7.9	8.1	7.7	8.2	8.0	8.2	8.0	8.5	8.1
27	8.0	7.9	8.1	7.9	8.0	7.9	8.1	7.9	8.2	7.9	8.4	8.1
28	8.0	7.9	8.1	8.0	8.1	7.9	8.7	7.8	8.2	7.9	8.5	8.0
29	8.0	7.9	8.0	7.9	8.2	8.0	8.8	8.4	8.2	8.0	8.5	8.0
30	8.1	8.0	8.0	7.9	8.3	8.0	8.7	8.3	8.1	7.9	8.4	8.1
31	---	---	8.0	7.9	---	---	8.4	8.1	7.9	7.7	---	---
MONTH	8.2	7.9	8.3	7.7	8.4	7.7	8.8	7.8	9.0	7.6	8.6	7.6
YEAR	9.0	6.7										

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	21.5	20.0	14.5	13.5	7.0	5.0	---	---	.5	.0	4.5	4.0
2	21.0	19.5	15.5	14.0	7.0	6.0	---	---	.5	.0	4.0	2.5
3	19.5	17.5	16.5	15.5	6.5	5.5	---	---	.5	.0	2.5	2.0
4	17.5	16.0	17.0	16.0	6.0	5.5	---	---	.5	.0	3.5	2.0
5	17.0	15.5	18.0	16.5	5.5	5.0	---	---	.5	.0	3.5	1.5
6	18.0	16.5	18.5	18.0	5.0	3.5	---	---	.5	.0	5.0	3.0
7	17.5	16.0	18.0	17.5	3.0	1.5	---	---	.5	.0	5.0	4.5
8	16.5	15.5	18.5	18.0	1.5	.5	---	---	.5	.0	---	---
9	16.0	14.5	18.5	17.5	1.0	.0	---	---	.5	.0	---	---
10	15.5	14.0	18.0	14.5	.0	.0	---	---	---	---	6.0	4.5
11	15.0	13.5	14.0	11.5	.0	.0	---	---	---	---	4.5	3.5
12	13.5	12.5	11.0	9.5	.5	.0	---	---	---	---	3.5	2.0
13	13.0	12.5	9.5	8.0	2.0	.5	---	---	---	---	3.0	1.5
14	13.5	12.0	8.0	7.5	3.5	2.0	---	---	---	---	1.5	1.0
15	13.5	13.0	9.0	7.0	3.5	2.0	---	---	---	---	1.5	.5
16	13.5	12.0	10.0	8.5	2.5	2.0	.5	.0	---	---	1.0	.5
17	---	---	11.0	10.0	3.0	2.5	.0	.0	---	---	1.0	1.0
18	---	---	10.0	8.5	3.5	3.0	1.0	.0	---	---	1.5	.5
19	---	---	8.5	8.0	4.0	3.5	1.0	1.0	---	---	2.5	1.5
20	---	---	---	---	4.0	3.5	1.0	.0	---	---	3.0	2.0
21	---	---	---	---	3.5	3.0	1.5	.5	---	---	3.5	3.0
22	---	---	8.5	8.5	3.0	2.5	2.0	1.0	2.0	1.5	4.0	3.0
23	---	---	9.5	8.5	3.0	2.0	1.0	.0	2.0	.5	4.5	4.0
24	---	---	9.5	9.0	4.0	2.5	.5	.0	2.5	1.5	4.0	3.5
25	15.0	15.0	9.0	8.0	4.0	3.5	1.0	.5	4.0	2.5	4.0	3.0
26	16.0	15.0	7.5	5.5	3.5	1.0	1.0	.0	4.0	3.0	5.0	4.0
27	16.0	15.5	5.5	5.0	1.5	.5	.0	.0	4.5	2.5	4.5	4.5
28	15.5	15.0	4.5	3.0	---	---	.0	.0	4.5	3.0	5.5	4.0
29	15.0	13.5	4.0	3.5	---	---	.0	.0	---	---	7.0	5.5
30	14.5	13.5	5.0	5.0	---	---	.0	.0	---	---	6.5	6.0
31	14.5	13.5	---	---	---	---	.0	.0	---	---	7.5	5.5
MONTH	21.5	12.0	18.5	3.0	7.0	.0	2.0	.0	4.5	.0	7.5	.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.5	7.0	15.0	13.0	24.0	21.5	27.5	26.0	25.0	23.0	22.5	21.5
2	8.0	8.0	15.0	12.5	23.5	22.0	26.0	24.0	26.0	24.0	23.0	20.5
3	7.5	7.5	15.0	13.0	23.0	22.0	24.0	23.5	26.5	25.0	23.0	21.5
4	9.0	7.5	15.0	11.5	22.5	20.5	23.0	22.5	26.0	24.5	23.5	22.0
5	10.0	9.0	12.0	11.5	22.5	20.5	23.0	22.0	25.0	23.5	23.5	22.0
6	10.5	9.5	12.5	11.5	22.5	20.5	25.0	22.0	24.0	23.0	24.0	22.5
7	12.0	10.0	12.5	11.5	21.5	20.5	25.5	23.5	24.5	23.0	24.5	23.0
8	12.0	11.0	13.0	12.0	22.5	21.0	26.0	24.5	24.0	22.5	25.0	23.5
9	11.5	10.5	14.5	12.5	22.5	21.0	26.5	25.0	24.5	22.5	25.5	24.0
10	13.0	11.0	---	---	22.5	20.0	26.0	25.5	24.5	23.5	26.5	25.0
11	13.5	12.5	---	---	23.0	20.5	25.5	24.0	23.5	22.5	26.0	25.0
12	14.0	12.0	---	---	23.5	22.0	25.0	23.0	24.0	21.5	26.0	25.0
13	14.5	12.5	---	---	23.0	20.5	24.5	23.5	24.0	23.0	26.0	25.0
14	14.5	12.5	---	---	21.5	19.0	26.0	23.5	24.5	23.0	25.5	24.5
15	14.5	12.5	---	---	21.5	19.5	25.5	24.5	25.5	23.5	25.5	24.0
16	13.5	12.0	---	---	22.5	20.0	26.0	24.5	25.5	24.0	25.0	24.0
17	14.0	11.5	---	---	24.0	21.5	26.0	24.0	26.0	24.0	24.5	23.0
18	14.0	12.5	---	---	25.5	23.0	26.0	24.0	25.5	24.5	25.5	23.5
19	13.5	12.0	---	---	26.0	24.0	26.5	24.5	26.0	24.5	26.5	24.5
20	12.5	11.0	---	---	25.5	23.5	27.5	25.5	26.0	24.0	27.0	25.5
21	11.0	10.0	---	---	24.0	23.0	28.0	26.5	25.0	23.5	27.0	25.5
22	11.0	9.0	---	---	24.5	22.5	28.5	26.5	25.0	23.5	26.5	23.0
23	10.5	10.0	18.0	17.0	24.0	21.5	28.5	27.0	25.5	23.5	23.0	21.0
24	11.5	10.0	17.5	17.5	24.5	22.0	28.0	26.5	26.0	24.0	22.5	21.5
25	11.0	10.5	19.5	17.0	24.5	22.5	26.0	25.0	26.5	25.0	22.5	21.0
26	11.0	10.0	20.0	18.0	26.0	23.5	26.5	24.0	26.0	25.0	21.5	19.5
27	12.5	10.0	21.0	19.0	27.5	25.0	26.5	25.5	26.0	24.5	21.0	19.5
28	14.0	11.0	22.0	19.5	28.0	26.0	26.5	24.5	27.0	24.5	21.5	19.5
29	14.5	12.5	22.0	20.0	28.0	26.0	26.0	25.0	26.0	25.0	20.0	18.5
30	15.5	13.5	23.5	21.5	28.0	26.5	26.0	24.0	26.0	24.5	20.0	18.5
31	---	---	23.5	21.5	---	---	24.0	23.0	24.0	22.5	---	---
MONTH	15.5	7.0	23.5	11.5	28.0	19.0	28.5	22.0	27.0	21.5	27.0	18.5
YEAR	28.5	.0										

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	10.2	7.1	11.4	10.2	---	---	13.3	12.8	11.5	10.9
2	---	---	10.5	9.1	10.3	9.5	---	---	13.3	13.1	12.0	11.5
3	---	---	9.8	8.8	11.0	10.4	---	---	13.2	12.8	12.2	11.8
4	---	---	8.9	7.5	11.4	11.0	---	---	13.2	13.1	12.3	11.6
5	---	---	8.0	6.9	11.4	11.1	---	---	13.1	12.8	12.3	11.4
6	---	---	7.8	6.8	11.2	11.0	---	---	12.8	12.7	12.4	11.6
7	---	---	6.9	6.3	12.1	11.3	---	---	12.8	12.5	12.2	11.4
8	---	---	6.8	5.6	12.4	12.2	---	---	12.6	12.4	---	---
9	---	---	5.8	5.3	12.5	12.3	---	---	12.5	12.2	---	---
10	---	---	6.8	5.4	12.5	12.4	---	---	---	---	12.8	11.4
11	---	---	8.1	6.9	12.4	12.1	---	---	---	---	13.0	11.7
12	---	---	9.2	8.1	12.1	12.0	---	---	---	---	12.9	12.5
13	---	---	10.8	9.3	12.0	11.9	---	---	---	---	12.8	11.7
14	---	---	10.8	9.9	12.0	11.5	---	---	---	---	12.9	12.8
15	---	---	10.2	9.4	11.8	11.4	---	---	---	---	13.0	12.8
16	---	---	9.9	8.1	11.8	11.7	12.7	12.6	---	---	13.0	12.8
17	---	---	9.0	8.3	11.9	11.8	12.8	12.4	---	---	13.2	13.0
18	---	---	9.2	8.6	11.9	11.7	12.7	12.4	---	---	13.4	13.2
19	---	---	8.7	8.6	11.7	11.6	12.7	12.4	---	---	13.4	13.2
20	---	---	---	---	11.6	11.6	12.4	12.3	---	---	13.4	13.3
21	---	---	---	---	11.6	11.5	12.5	12.3	---	---	13.3	12.9
22	---	---	9.9	9.3	11.7	11.5	12.5	12.3	12.2	12.1	12.9	12.7
23	---	---	9.7	8.6	11.6	11.5	12.4	12.2	12.2	11.8	12.7	12.6
24	---	---	10.0	9.6	11.5	11.2	12.5	12.3	12.0	11.8	12.7	12.0
25	7.4	6.6	10.2	9.7	11.3	11.1	12.5	12.3	11.9	11.3	12.4	12.3
26	6.5	6.2	10.6	10.2	11.9	11.1	13.2	12.5	11.6	11.1	12.2	11.8
27	6.4	6.1	11.1	10.6	12.2	11.6	13.0	12.5	11.5	11.1	11.8	11.6
28	7.0	6.0	11.5	11.3	---	---	12.8	12.7	11.5	10.8	11.9	11.7
29	7.7	6.9	11.6	11.3	---	---	12.8	12.7	---	---	11.8	11.5
30	7.9	7.4	11.3	11.1	---	---	13.1	12.8	---	---	11.7	11.4
31	8.1	7.5	---	---	---	---	13.1	12.7	---	---	11.8	11.6
MONTH	8.1	6.0	11.6	5.3	12.5	9.5	13.2	12.2	13.3	10.8	13.4	10.9

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.6	11.3	8.9	8.2	6.4	6.0	9.2	6.2	11.3	5.7	5.6	4.3
2	11.4	11.3	9.2	8.2	6.3	5.9	7.4	5.4	11.7	5.6	6.6	5.6
3	11.4	11.3	9.3	8.3	6.5	6.1	5.8	5.3	10.9	5.7	7.1	6.4
4	11.4	10.9	8.9	8.2	7.0	6.3	5.3	5.1	14.9	6.1	7.5	6.3
5	10.8	10.3	8.9	8.5	7.4	6.4	5.8	5.3	12.1	7.1	8.3	6.6
6	10.2	9.9	8.7	8.3	7.6	6.6	6.2	5.6	8.9	5.3	9.6	6.7
7	10.2	9.4	8.8	8.3	8.3	6.8	6.2	5.5	7.1	5.4	9.8	6.9
8	10.1	9.5	9.0	8.2	8.6	7.3	5.9	5.1	---	---	8.9	6.7
9	10.2	10.0	9.0	8.2	7.7	5.5	6.3	5.2	7.4	6.8	10.8	7.2
10	10.0	9.7	8.3	7.9	6.1	5.7	6.2	5.2	7.2	6.4	11.5	6.9
11	9.6	9.2	8.6	7.9	6.8	6.2	9.0	5.5	7.1	6.8	11.7	6.8
12	9.2	8.9	8.0	7.5	7.0	6.5	12.0	6.7	6.8	6.6	10.7	6.5
13	9.0	8.8	8.7	7.8	7.4	6.6	10.3	7.3	6.8	6.3	9.0	6.0
14	9.0	8.7	8.1	7.8	8.2	7.0	12.5	7.0	6.3	5.7	7.9	6.0
15	9.2	8.7	8.4	8.0	8.0	7.3	10.3	7.1	7.1	6.0	9.0	5.2
16	9.4	8.9	9.0	8.4	8.7	7.2	11.5	6.7	7.9	6.4	7.8	6.0
17	9.4	8.9	9.0	8.7	9.5	7.1	13.4	6.6	7.5	6.2	7.1	5.4
18	9.4	8.7	8.6	8.3	9.6	7.0	13.3	7.5	7.4	6.2	8.0	5.6
19	9.5	9.0	8.3	7.9	9.7	6.5	11.2	6.5	8.4	6.4	7.7	5.3
20	9.1	8.5	8.2	7.5	7.7	4.2	11.9	6.2	9.4	6.2	8.0	5.2
21	9.9	9.0	7.9	7.4	5.6	4.8	10.3	5.8	10.6	7.0	8.7	5.5
22	10.5	9.9	8.8	7.6	6.2	5.7	8.3	4.8	10.7	7.2	7.3	5.6
23	10.4	10.1	8.5	7.8	6.2	6.0	7.3	4.3	12.2	7.4	9.8	5.8
24	10.0	9.4	8.0	7.5	6.5	5.9	5.9	4.3	12.8	7.5	9.4	6.8
25	9.6	9.3	7.8	7.0	6.6	6.1	6.3	4.4	12.5	7.3	11.0	6.9
26	9.5	8.9	7.6	7.3	6.6	6.0	7.6	4.7	9.3	6.5	12.9	7.4
27	9.2	8.9	7.7	7.2	7.0	5.9	6.1	4.5	10.3	6.1	11.3	8.0
28	8.9	8.6	7.6	7.2	7.5	5.6	12.7	6.8	8.9	5.6	12.0	7.3
29	8.7	8.4	7.3	6.8	8.1	5.8	12.8	6.7	7.8	6.0	12.9	7.6
30	8.7	8.2	6.9	6.5	9.2	5.9	9.9	5.8	6.7	4.9	11.9	8.2
31	---	---	6.8	6.5	---	---	8.5	5.0	5.7	4.9	---	---
MONTH	11.6	8.2	9.3	6.5	9.7	4.2	13.4	4.3	14.9	4.9	12.9	4.3
YEAR	14.9	4.2										

03235500 TAR HOLLOW CREEK AT TAR HOLLOW STATE PARK, OH

LOCATION.--Lat 39°23'22", long 82°45'03", in NE 1/4 sec. 36, T.10 N., R.20 W., Ross County, Hydrologic Unit 05060002, in Tar Hollow State Park, on left bank 2.0 mi (3.2 km) upstream from mouth and 5.2 mi (8.4 km) south of Adelphi.

DRAINAGE AREA.--1.35 mi² (3.50 km²).

PERIOD OF RECORD.--August 1966 to September 1978 (discontinued).

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder and V-notch weir. Datum of gage is 793.63 ft (241.898 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for periods of no gage height-record which are poor. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--32 years, 1.24 ft³/s (0.0351 m³/s), 12.47 in/yr (317 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 957 ft³/s (27.1 m³/s) May 24, 1968, gage height, 5.66 ft (1.725 m) (in gage well), 5.84 ft (1.780 m) (from floodmark), from rating curve extended above 92 ft³/s (2.61 m³/s) on basis of slope-area measurements at gage height 5.21 ft (1.588 m) and at peak flow; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 28 ft³/s (0.793 m³/s) Mar. 14, gage height, 2.65 ft (0.808 m), no peak above base of 50 ft³/s (1.42 m³/s); minimum, no flow Feb. 21 to Mar. 8, July 11-13, 18-23, Aug. 22, 24-28, Sept. 6-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.75	.02	3.6	.04	1.3	.00	1.6	1.3	.28	.03	.10	.10
2	.04	.02	1.8	.04	.94	.00	1.4	1.1	.20	.06	.06	.03
3	.36	.02	.98	.04	.62	.00	1.3	.87	.20	.14	.03	.01
4	.20	.02	.40	.04	.43	.00	1.3	3.4	.20	.14	.02	.01
5	.15	.02	4.5	.04	.30	.00	1.3	4.9	.14	.14	.03	.01
6	.20	.02	5.0	.07	.21	.00	1.3	2.9	.14	.10	.06	.00
7	.15	.02	3.2	.25	.19	.00	1.4	2.2	.20	.06	.28	.00
8	.36	.02	1.8	.80	.10	.00	1.4	8.7	.28	.01	.20	.00
9	.10	.02	1.1	2.4	.06	.01	1.4	10	.53	.01	.10	.00
10	.05	.02	.70	15	.06	.20	1.4	4.6	.28	.01	.10	.00
11	.05	.02	.42	7.6	.06	1.0	1.8	2.9	.36	.00	.06	.00
12	.04	.02	.24	5.0	.03	7.4	1.8	2.6	.20	.00	.06	.00
13	.04	.02	.40	3.3	.03	7.8	1.6	11	.14	.00	.03	.00
14	.03	.02	5.6	2.2	.02	17	1.4	7.8	.10	.03	.03	.00
15	.03	.02	5.0	1.5	.02	8.3	1.3	5.3	.06	.03	.02	.00
16	.02	.04	2.9	.98	.01	5.3	1.3	5.3	.06	.02	.03	.00
17	.02	.30	1.5	.66	.01	3.9	1.1	5.3	.03	.01	.02	.00
18	.02	.50	.70	.44	.01	2.6	1.8	3.4	.03	.00	.01	.00
19	.02	.30	.37	.28	.01	3.1	6.9	2.4	.06	.00	.01	.00
20	.02	.17	.19	.20	.01	3.4	4.9	1.8	.06	.00	.02	.00
21	.02	.40	.12	.14	.00	3.9	3.9	1.4	.75	.00	.01	.00
22	.02	1.3	.10	.09	.00	3.1	3.4	1.1	.36	.00	.00	.00
23	.02	.87	.07	.12	.00	2.4	2.9	1.1	.20	.00	.01	.00
24	.02	.64	.06	.50	.00	1.8	2.6	1.3	.10	.10	.00	.00
25	.02	.44	.06	2.2	.00	4.2	8.3	1.1	.06	.20	.00	.00
26	.02	.36	.05	9.2	.00	15	6.9	1.0	.10	.10	.00	.00
27	.02	.28	.05	9.0	.00	8.3	3.6	.75	.06	.06	.00	.00
28	.02	.28	.05	6.4	.00	3.9	2.4	.64	.06	.02	.00	.00
29	.02	.20	.05	4.5	---	2.9	2.0	.44	.03	.01	.02	.00
30	.02	.44	.04	2.9	---	2.2	1.6	.44	.02	.02	.03	.00
31	.02	---	.04	2.0	---	1.8	---	.36	---	.10	.14	---
TOTAL	3.47	6.82	41.51	72.93	4.42	109.51	75.3	97.40	5.29	1.40	1.48	.16
MEAN	.11	.23	1.34	2.35	.16	3.53	2.51	3.14	.18	.045	.048	.005
MAX	.75	1.3	5.6	10	1.3	17	8.3	11	.75	.20	.28	.10
MIN	.02	.02	.04	.04	.00	.00	1.1	.36	.02	.00	.00	.00
CFSM	.08	.17	.99	1.74	.12	2.62	1.86	2.33	.13	.03	.04	.004
IN.	.10	.19	1.14	2.01	.12	3.02	2.07	2.68	.15	.04	.04	.00

CAL YR 1977 TOTAL 317.31 MEAN .87 MAX 14 MIN .00 CFSM .64 IN 8.74
WTR YR 1978 TOTAL 419.69 MEAN 1.15 MAX 17 MIN .00 CFSM .85 IN 11.56

Note: No gage height-record Oct. 9 to Nov. 21, Dec. 2 to Feb. 8.

RESERVOIRS IN SCIOTO RIVER BASIN

03220500 O'SHAUGHNESSY RESERVOIR NEAR DUBLIN.--Lat 40°09'14", long 83°07'33", Delaware County, Hydrologic Unit 05060001, in gate house of dam on Scioto River, 4.0 mi (6.4 km) north of Dublin. DRAINAGE AREA, 979 mi² (2,536 km²). PERIOD OF RECORD, October 1924 to current year. GAGE, water-stage recorder. Monthend contents only for some periods published in WSP 1305. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by city of Columbus). Prior to Dec. 2, 1940, nonrecording gage at same site and datum.

Reservoir is formed by concrete dam; dam completed and storage began in 1924. Usable capacity, 14,500 acre-ft (5.55 hm³), between elevations, 789.5 ft (240.64 m) (sill of outlet gate), and 845 ft (258 m) (crest of spillway), based on survey made in 1942. Flashboards installed May 8, 1945, additional capacity, 2,480 acre-ft (3.06 hm³), between elevations 845 ft (258 m) (crest of spillway), and 847.9 ft (258.44 m) (crest of flashboards). Dead storage below elevation 789.5 ft (240.64 m), 55 acre-ft (67,880 m³). Figures given herein represent usable contents. Water used for municipal supply of city of Columbus and recreational purposes. Capacity table computed from data furnished by city of Columbus.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 24,240 acre-ft (29.9 hm³) Jan. 22, 1959, elevation, 854.40 ft (260.421 m); minimum, 43 acre-ft (53,000 m³) Feb. 11, 1945, elevation, 791.97 ft (241.392 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 20,000 acre-ft (24.7 hm³) Mar. 16, elevation, 850.82 ft (259.330 m); minimum, 14,040 acre-ft (17.3 hm³) Sept. 30, elevation, 844.38 ft (257.367 m).

03221500 GRIGGS RESERVOIR NEAR COLUMBUS.--Lat 40°00'54", long 83°05'38", Franklin County, Hydrologic Unit 05060001, on left abutment of dam on Scioto River, 6.2 mi (10.0 km) northwest of State Capitol building in Columbus, and 6.5 mi (10.5 km) upstream from Olentangy River. DRAINAGE AREA, 1,044 mi² (2,704 km²). PERIOD OF RECORD, January 1921 to current year. GAGE, water-stage recorder. Monthend contents only for some periods, published in WSP 1305. Daily readings have been obtained by city of Columbus, Division of Water, since 1908. Datum of gage is 680.38 ft (207.380 m) National Geodetic Vertical Datum, adjustment of 1912 (levels by city of Columbus); gage readings have been reduced to elevations above mean sea level. Prior to Oct. 4, 1940 nonrecording gage at same site and datum.

Reservoir formed by concrete dam; dam completed and storage began in 1905. Usable capacity, 3,700 acre-ft (4.56 hm³) between elevations, 735.4 ft (224.15 m) (lowest outlets), and 753.4 ft (229.64 m) (crest of spillway), based on survey made in 1935. Flashboards installed July 28, 1945, additional capacity, 750 acre-ft (925,000 m³), between elevations, 753.4 ft (229.64 m) (crest of spillway) and 755.6 ft (230.31 m) (crest of flashboards). Dead storage below elevation, 735.4 ft (224.15 m), 239 acre-ft (295,000 m³). Figures given herein represent usable contents. Water is used for municipal supply of city of Columbus and recreational purposes. Capacity table computed from data furnished by city of Columbus.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 7,490 acre-ft (9.24 hm³) Jan. 22, 1959, elevation, 763.91 ft (232.840 m); minimum, 38 acre-ft (46,900 m³) Jan. 24, 1945, elevation, 735.78 ft (224.266 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 5,800 acre-ft (7.15 hm³) Mar. 17, elevation, 759.34 ft (231.447 m); minimum, 3,920 acre-ft (4.83 hm³) Aug. 27, elevation, 754.04 ft (229.831 m).

03225000 DELAWARE LAKE NEAR DELAWARE.--Lat 40°21'31", long 83°04'10", in T.5 N., R.19 W., Delaware County, Hydrologic Unit 05060001, in gate house of dam on Olentangy River, 4.0 mi (6.4 km) north of Delaware. DRAINAGE AREA, 386 mi² (1,000 km²). PERIOD OF RECORD, March 1951 to current year. Prior to October 1971 published as Delaware Reservoir. GAGE, water-stage recorder. Datum of gage is Sandy Hook datum (levels by Corps of Engineers).

Lake is formed by earthfill dam with concrete spillway; storage began Mar. 20, 1951. Usable capacity 24,500 acre-ft (30.2 hm³) between elevation, 888.0 ft (269.44 m) (lowest outlet) and 922.0 ft (281.03 m) (crest of spillway). Additional flood-control storage above elevation 922.0 ft (281.03 m) by taintor gates on spillway, 107,500 acre-ft (133 hm³). Normal conservation pool storage 8,400 acre-ft (10.4 hm³), elevation, 910.0 ft (277.37 m) winter, and 14,000 acre-ft (17.3 hm³), elevation, 915.0 ft (278.89 m) summer. No dead storage. Figures given herein represent usable contents. Lake is used primarily for flood control although the conservation pool is operated to augment low flow for water supply, pollution abatement, and for recreation and wildlife conservation purposes. Outflow is controlled mostly by operation of gates in sluiceways through dam, but above spillway level, taintor gates on spillway can be used. Capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 113,000 acre-ft (139 hm³) Jan. 25, 1959, elevation, 944.75 ft (287.960 m); minimum, 2,070 acre-ft (2.55 hm³) Feb. 13, 1970, elevation, 899.43 ft (274.146 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 53,320 acre-ft (65.7 hm³) Mar. 18, elevation, 933.59 ft (284.558 m); minimum, 7,960 acre-ft (9.81 hm³) Jan. 16, elevation, 909.51 ft (277.219 m).

03228400 HOOVER RESERVOIR AT CENTRAL COLLEGE.--Lat 40°06'30", long 82°52'59", in T.2 N., R.17 W., Franklin County, Hydrologic Unit 05060001, in gate house of dam on Big Walnut Creek, 0.5 mi (0.8 km) northeast of Central College, and 12 mi (19 km) northeast of Columbus. DRAINAGE AREA, 190 mi² (492 km²). PERIOD OF RECORD, March 1955 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Sept. 10, 1956, nonrecording gage at same site and datum.

Reservoir formed by earthfill dam with concrete spillway; dam completed in 1954 and storage began in March 1955. Usable capacity, 60,130 acre-ft (74.1 hm³) between elevations 830.0 ft (252.98 m) (lowest outlet), and 890.0 ft (271.27 m) (crest of spillway). Additional flood-control storage above elevation 890.0 ft (271.27 m) by bascule gates installed in May 1970, 25,750 acre-ft (31.7 hm³). Dead storage below elevation 830.0 ft (252.98 m), 214 acre-ft (264,000 m³). Figures given herein represent usable contents. Reservoir is used for municipal supply of city of Columbus and for recreational purposes. Outflow is controlled mostly by operation of valves in tunnel through dam, but above spillway level bascule gates can be used. Capacity table computed from data furnished by city of Columbus.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 83,258 acre-ft (103 hm³), revised, Feb. 24, 1975, elevation, 897.26 ft (273.485 m); minimum, 19,010 acre-ft (23.4 hm³) Mar. 1, 1964, elevation, 868.58 ft (264.743 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 70,920 acre-ft (87.4 hm³) Mar. 15, 27, elevation, 893.70 ft (272.400 m); minimum, 38,550 acre-ft (47.5 hm³) Nov. 21, elevation, 881.21 ft (268.593 m).

REVISIONS.--The maximum contents for the water year 1975 has been revised to 83,258 acre-ft (103 hm³) Feb. 24, 1975, elevation 897.26 ft (273.485 m) superseding figure published in the report for 1975.

RESERVOIRS IN SCIOTO RIVER BASIN--Continued

03228804 ALUM CREEK LAKE NEAR WORTHINGTON.--Lat 40°11'03", long 82°57'50", Delaware County, Hydrologic Unit 05060001, in outlet structure of dam on Alum Creek, 180 ft (54.9 m) upstream from Lewis Center Road, 0.3 mi (0.48 km) west of Africa, 4.2 mi (6.84 km) northwest of Westerville, and 7.0 mi (11.3 km) north of Worthington. DRAINAGE AREA, 122 mi² (316 km²). PERIOD OF RECORD, January 1975 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Lake formed by earthfill dam with concrete gravity channel section; dam completed and storage began in 1974, station established Jan. 16, 1975. Usable capacity, 48,940 acre-ft (60.3 hm³) between elevation 835.0 ft (254.51 m) (lowest outlet) and 878.0 ft (267.61 m) (crest of spillway). Additional flood-control storage above 878.0 ft (267.61 m) by taintor gates on spillway 85,000 acre-ft (104.8 hm³). Normal conservation pool storage 71,120 acre-ft (87.7 hm³) elevation 885.0 ft (269.75 m) winter, and 80,860 acre-ft (99.7 hm³) elevation 888.0 ft (270.66 m) summer. Dead storage 879 acre-ft (1.08 hm³) below 835.0 ft (254.51 m). Figures given herewith represent usable contents. Lake is used for flood control, recreation, water supply, and wildlife conservation purposes. Outflow is controlled mostly by operation of gates in sluiceway through dam, but above spillway level, taintor gates can be used. Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 93,370 acre-ft (115 hm³) Mar. 30, 1978, elevation, 891.51 ft (271.732 m); minimum, 5,860 acre-ft (7.23 hm³) Jan. 25, 1975, elevation, 849.59 ft (258.955 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 93,370 acre-ft (115 hm³) Mar. 30, elevation, 891.51 ft (271.732 m); minimum, 54,980 acre-ft (67.8 hm³) Oct. 1, elevation, 879.36 ft (268.029 m).

03230890 DEER CREEK LAKE NEAR PANCOASTBURG.--Lat 39°37'20", long 83°12'58", Pickaway County, Hydrologic Unit 05060002, in outlet tower of dam on Deer Creek, 1,000 ft (305 m) upstream from Crownover Mill Road, and 2.8 mi (4.5 km) east of Pancoastburg. DRAINAGE AREA, 277 mi² (717 km²). PERIOD OF RECORD, April 1968 to current year. Prior to October 1971 published as Deer Creek Reservoir. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Lake formed by earthfill dam with concrete spillway; dam completed in 1968 and storage began April 1, 1968. Usable capacity 26,440 acre-ft (32.6 hm³) between elevation 772.0 ft (235.31 m) (lowest outlet) and 814.0 ft (248.11 m) crest of spillway. Additional flood control storage above 814.0 ft (248.11 m) by taintor gates on spillway 76,100 acre-ft (93.8 hm³). Normal conservation pool storage 6,420 acre-ft (7.92 hm³), elevation, 796.0 ft (242.62 m) winter, and 21,030 acre-ft (25.9 hm³), elevation, 810.0 ft (246.89 m) summer. Dead storage 2 acre-ft (2,470 m³) below 772.0 ft (235.31 m). Figures given herein represent usable contents. Lake is used primarily for flood control although the conservation pool is operated to augment low flow for water supply, pollution abatement and for recreation and wildlife conservation purposes. Outflow is controlled mostly by operation of gates in sluiceways through dam, but above spillway level, taintor gates on spillway can be used. Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 71,830 acre-ft (88.6 hm³) May 31, 1969, elevation, 835.25 ft (254.584 m); minimum, 1,140 acre-ft (1.41 hm³) Jan. 8, 1970, elevation, 784.75 ft (239.192 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 51,420 acre-ft (63.4 hm³) Mar. 29, elevation, 827.69 ft (252.252 m); minimum, 6,380 acre-ft (7.87 hm³) Dec. 28, elevation, 795.95 ft (242.606 m).

03232460 PAINT CREEK LAKE NEAR RAINBRIDGE.--Lat 39°15'09", long 83°20'59", Highland County, Hydrologic Unit 05060003, in outlet structure of dam on Paint Creek, 1.9 mi (3.1 km) upstream from Rocky Fork, and 4.5 mi (7.2 km) northwest of Rainbridge. DRAINAGE AREA, 570 mi² (1,476 km²). PERIOD OF RECORD, April 1974 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Lake is formed by earth and rock embankment dam with concrete spillway. Dam completed in 1974 and storage began April 8, 1974. Usable capacity 37,420 acre-ft (46.1 hm³) between elevation 750.0 ft (228.60 m) (lowest outlet), and 810.0 ft (246.89 m) (crest of spillway). Additional flood control storage above elevation 810.0 ft (246.89 m) by three taintor gates on spillway, 107,600 acre-ft (132.67 hm³). Seasonal pool storage 20,310 acre-ft (25.0 hm³) elevation, 798.0 ft (243.23 m). Dead storage 5 acre-ft (6.170 m) below elevation 750.0 ft (228.60 m). Figures given herein represent usable contents. Lake is used primarily for flood control although seasonal pool is used for water quality control, water supply, recreation and wildlife conservation purposes. Outflow is controlled mostly by operation of gates in sluiceway through dam but above spillway level taintor gates on spillway can be used. Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 97,370 acre-ft (120 hm³) Mar. 18, 1978, elevation, 833.49 ft (254.045 m); minimum since initial filling was completed on May 6, 1974, 8,930 acre-ft (11.0 hm³) Mar. 28, 1975, elevation, 786.03 ft (239.582 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 97,370 acre-ft (120 hm³) Mar. 18, elevation, 833.49 ft (254.045 m); minimum, 9,610 acre-ft (11.8 hm³) Dec. 10 elevation, 786.96 ft (239.865 m).

RESERVOIRS IN SCIOTO RIVER BASIN--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
	03220500 O'SHAUGHNESSY RESERVOIR			03221500 GRIGGS RESERVOIR			03225000 DELAWARE RESERVOIR		
Sept. 30.....	848.02	17080	-	755.36	4360	-	914.84	13790	-
Oct. 31.....	848.04	17100	+20	755.19	4310	-50	914.44	13270	-520
Nov. 30.....	848.26	17320	+220	756.06	4600	+290	914.45	13280	+10
Dec. 31.....	848.38	17440	+120	755.83	4520	-80	910.07	8470	-4810
CAL YR 1977	-	-	+360	-	-	+670	-	-	+10
Jan. 31.....	848.53	17590	+150	756.17	4630	+110	910.77	9170	+700
Feb. 28.....	848.17	17230	-360	755.62	4450	-180	909.95	8360	-810
Mar. 31.....	849.42	18490	+1260	756.93	4910	+460	926.68	34200	+25840
Apr. 30.....	848.87	17930	-560	755.98	4580	-330	915.03	14040	-20160
May 31.....	848.91	17970	+40	756.04	4600	+20	915.69	14900	+860
June 30.....	848.43	17490	-480	755.59	4440	-160	915.12	14160	-740
July 31.....	848.09	17150	-340	755.43	4390	-50	914.20	12960	-1200
Aug. 31.....	847.98	17050	-100	755.48	4400	+10	912.80	10360	-1600
Sept. 30.....	844.41	14060	-2990	755.36	4360	-40	911.55	9950	-1410
WTR YR 1978	-	-	-3020	-	-	0	-	-	-3840
	03228400 HOOVER RESERVOIR			03228804 ALUM CREEK LAKE			03230890 DEER CREEK LAKE		
Sept. 30.....	881.40	38940	-	879.37	55010	-	802.56	12400	-
Oct. 31.....	883.36	43200	+4260	879.83	55230	+220	796.44	6750	-5650
Nov. 30.....	882.58	41450	-1750	880.32	57550	+2320	796.91	7110	+360
Dec. 31.....	892.90	68360	+26910	879.99	56650	-900	796.21	6580	-530
CAL YR 1977	-	-	+33620	-	-	-4630	-	-	-10
Jan. 31.....	892.82	68120	-240	882.16	62660	+6010	798.99	8870	+2290
Feb. 28.....	889.67	59240	-8880	882.47	63560	+900	796.27	6620	-2250
Mar. 31.....	893.07	68880	+9640	890.56	89860	+26300	825.04	45700	+39080
Apr. 30.....	892.83	68150	-730	888.01	80890	-8970	810.01	21040	-24660
May 31.....	892.82	68120	-30	887.96	80720	-170	810.72	21960	+920
June 30.....	892.56	67340	-780	888.10	81200	+480	810.09	21140	-820
July 31.....	889.58	59000	-8340	887.78	80120	-1080	810.15	21220	+80
Aug. 31.....	887.32	53020	-5980	887.71	79890	-230	810.22	21310	+90
Sept. 30.....	883.96	44580	-8440	887.20	78180	-1710	809.85	20840	-470
WTR YR 1978	-	-	+5640	-	-	+23170	-	-	+8440
	03232460 PAINT CREEK LAKE								
Sept. 30.....	797.91	20200	-						
Oct. 31.....	795.86	17850	-2350						
Nov. 30.....	788.09	10480	-7370						
Dec. 31.....	787.94	10360	-120						
CAL YR 1977	-	-	+320						
Jan. 31.....	792.52	14390	+4030						
Feb. 28.....	787.93	10350	-4040						
Mar. 31.....	815.87	48530	+38180						
Apr. 30.....	798.47	20880	-27650						
May 31.....	798.44	20840	-40						
June 30.....	798.34	20720	-120						
July 31.....	798.40	20790	+70						
Aug. 31.....	798.85	21330	+540						
Sept. 30.....	797.81	20090	-1240						
WTR YR 1978	-	-	-110						

03237280 UPPER TWIN CREEK AT MCGAW, OH

(HYDROLOGIC BENCH-MARK STATION)

LOCATION.--Lat 38°38'37", long 83°12'57", Scioto County, Hydrologic Unit 05090201, on right bank, 0.3 mi (0.5 km) downstream from Brown Run, 0.3 mi (0.5 km) upstream from Tucker Run, 0.7 mi (1.1 km) upstream from bridge on U.S. Highway 52 at McGaw, 2.7 mi (4.3 km) northeast of Buena Vista, and 3.2 mi (5.1 km) upstream from mouth.

DRAINAGE AREA.--12.2 mi² (31.6 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 543.41 ft (165.631 m) National Geodetic Vertical Datum of 1929. Ohio Department of Highways bench mark. Prior to July 21, 1972 at site 0.7 mi (1.1 km) downstream at datum 23.41 ft (7.135 m) lower.

REMARKS.--Records good except those for winter periods which are fair.

AVERAGE DISCHARGE.--15 years, 13.2 ft³/s (0.374 m³/s), 14.69 in/yr (373 mm/yr)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,500 ft³/s (99.1 m³/s) Mar. 4, 1964, gage height, 9.7 ft (2.96 m), in gage well, 10.2 ft (3.11 m), from outside highwater mark from rating curve extended above 300 ft³/s on basis of slope-area measurement of peak flow; no flow for many days most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 3, 1960 reached a stage of 11.62 ft (3.542 m), discharge, 7,230 ft³/s (205 m³/s), on basis of contracted-opening and flow-over-road measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft³/s (12.7 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 5	0700	697	19.7	4.74	1.445	May 8	1615	676	19.1	3.63	1.106
Jan. 26	0100	*2080	58.9	*5.48	1.670	June 12	1900	538	15.2	3.36	1.024
Mar. 14	0715	715	20.5	3.72	1.134	Aug. 7	0015	650	18.4	3.58	1.091
Mar. 25	2215	563	15.9	3.41	1.039	Sept. 14	2245	881	24.9	3.99	1.216

Minimum discharge, 0.22 ft³/s (0.006 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	.76	50	1.4	6.4	3.8	15	15	1.6	1.0	4.8	12
2	4.8	.76	21	1.2	5.8	3.8	12	10	1.3	34	2.4	3.6
3	2.5	.76	14	1.0	5.6	3.8	9.5	7.8	1.2	74	1.6	2.0
4	1.3	.76	15	1.3	5.4	3.9	16	170	1.0	12	1.2	1.2
5	.76	.76	217	1.7	5.2	4.4	27	98	.95	6.8	1.1	.87
6	.62	2.5	57	2.2	5.0	5.0	24	43	.95	6.0	16	.70
7	.49	6.9	23	2.9	4.8	5.6	19	31	2.4	3.7	109	.59
8	.76	6.0	15	155	4.7	7.0	16	239	5.2	2.5	8.6	.51
9	4.8	4.4	53	96	4.6	9.0	13	113	12	1.8	3.5	.47
10	3.7	3.3	30	45	4.5	25	12	40	3.7	1.5	2.1	.43
11	2.5	2.5	14	30	4.4	50	11	33	2.2	1.5	1.6	.41
12	1.6	1.9	11	25	4.3	110	9.5	23	59	1.2	1.3	.39
13	1.1	1.3	11	20	4.2	160	8.4	100	34	1.0	1.0	.40
14	.76	1.1	18	15	4.1	329	6.8	75	6.0	1.1	.83	50
15	.76	.92	20	11	4.1	84	6.4	84	3.0	1.1	.71	47
16	.76	1.1	16	9.6	4.0	43	6.0	43	2.0	.95	.62	5.6
17	.62	14	14	8.2	4.0	39	5.6	34	1.5	.88	.55	2.9
18	.62	12	12	7.4	4.0	36	18	31	1.2	.75	.51	2.0
19	.62	6.9	8.9	6.8	4.0	33	27	19	2.5	.69	.51	1.5
20	.62	5.2	7.5	6.2	3.9	32	36	15	1.9	.63	.97	1.2
21	.49	5.2	6.4	5.6	3.9	28	35	13	17	.63	.71	.99
22	.49	4.8	5.4	5.2	3.9	21	27	11	3.9	.69	.54	.88
23	.38	4.8	4.6	4.8	3.9	18	24	8.4	2.2	.75	.44	.79
24	.38	4.8	4.0	19	3.8	18	25	8.9	1.6	.81	.38	.77
25	.49	4.4	3.5	230	3.8	88	31	8.4	1.2	2.5	.34	.77
26	.62	4.4	3.0	359	3.8	165	42	8.4	4.2	2.2	.32	.72
27	.62	3.7	2.6	47	3.8	58	36	5.6	2.5	1.4	.29	.68
28	.92	3.3	2.3	20	3.8	16	28	3.9	1.6	1.0	.28	.63
29	.92	5.6	2.0	12	---	28	23	3.2	1.2	.81	.31	.59
30	.92	31	1.8	8.8	---	21	20	2.5	1.0	.88	1.1	.59
31	.76	---	1.6	7.4	---	18	---	2.2	---	38	41	---
TOTAL	43.18	145.82	664.6	1165.7	123.7	1466.3	589.2	1299.3	180.00	202.77	204.61	141.18
MEAN	1.39	4.86	21.4	37.6	4.42	47.3	19.6	41.9	6.00	6.54	6.60	4.71
MAX	6.5	31	217	359	6.4	329	42	239	59	74	109	50
MIN	.38	.76	1.6	1.0	3.8	3.8	5.6	2.2	.95	.63	.28	.39
CFSM	.11	.38	1.67	2.94	.35	3.70	1.53	3.27	.47	.51	.52	.37
IN.	.13	.42	1.93	3.39	.36	4.26	1.71	3.78	.52	.59	.59	.41

CAL YR 1977 TOTAL 3685.50 MEAN 10.1 MAX 217 MIN .08 CFSM .79 IN 10.71
WTR YR 1978 TOTAL 6226.36 MEAN 17.1 MAX 359 MIN .28 CFSM 1.34 IN 18.09

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964 to current year.

PERIOD OF RECORD.--
WATER TEMPERATURES: Water years 1963-66, 1967-70, July 1972 to current year.
SUSPENDED SEDIMENT DISCHARGE: Water years 1964-69 (periodic), 1969 to 1973 (daily), 1974 to current year (periodic).

INSTRUMENTATION.--Water temperature recorder since July 1972.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 36.0°C July 20, 21, 1977; minimum, 0.0°C on several days during 1973, and 1978.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 33.0°C July 23; minimum, 0.0°C Jan. 23-25, Feb. 10, 11.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT										
18...	1225	.59	120	7.0	11.5	10.3	94	1200	13	210
NOV										
15...	1200	.74	115	7.2	9.5	11.2	97	78	13	100
DEC										
13...	1415	11	82	6.5	4.5	11.6	91	94	22	39
JAN										
24...	1230	8.1	78	6.7	.0	11.8	80	120	1	12
FEB										
09...	1230	4.6	80	7.0	.5	12.5	85	18	0	0
MAR										
06...	1425	5.2	90	6.8	4.0	13.1	100	18	0	13
APR										
04...	1215	9.1	90	6.8	12.0	10.5	97	130	K2	12
MAY										
08...	1240	579	78	6.9	11.0	10.8	97	2200	1400	6100
JUN										
06...	1310	.95	120	6.8	23.0	8.5	98	1600	450	97
JUL										
10...	1245	1.4	118	6.9	25.0	8.4	100	880	36	75
AUG										
07...	1100	47	85	7.0	19.0	8.9	95	2700	480	1600
SEP										
13...	1200	.38	120	6.8	25.0	8.4	100	140	12	300

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)
OCT									
18...	45	28	7.5	6.3	3.5	2.4	20	0	16
NOV									
15...	42	22	7.3	5.8	3.5	2.0	25	0	21
DEC									
13...	28	19	4.8	4.0	2.4	2.0	12	0	10
JAN									
24...	30	22	5.0	4.3	2.8	1.7	10	0	8
FEB									
09...	31	24	5.5	4.3	2.8	1.6	9	0	7
MAR									
06...	32	24	5.2	4.5	3.1	1.6	9	0	7
APR									
04...	29	19	5.1	4.0	2.6	1.8	13	0	11
MAY									
08...	25	17	4.2	3.6	2.6	1.8	10	0	8
JUN									
06...	36	--	6.5	4.8	3.7	2.4	--	--	14
JUL									
10...	35	20	6.2	4.8	3.4	2.4	--	--	15
AUG									
07...	28	20	4.9	3.9	1.8	1.8	--	--	8
SEP									
13...	42	26	7.4	5.6	3.6	2.3	--	--	16

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
OCT									
18...	3.2	30	2.8	.0	9.0	75	71	.24	.00
NOV									
15...	2.5	27	2.5	.0	9.0	70	69	.21	.01
DEC									
13...	6.1	23	1.5	.0	11	47	55	.29	.00
JAN									
24...	3.2	26	1.8	.1	9.1	56	56	.19	.01
FEB									
09...	1.4	26	2.0	.0	8.9	52	56	.19	.00
MAR									
06...	2.3	31	1.6	.0	8.9	58	60	.18	.01
APR									
04...	3.3	25	1.3	.0	9.5	58	56	.20	.00
MAY									
08...	2.0	26	1.9	.0	9.5	66	55	.18	.07
JUN									
06...	--	34	3.3	.0	11	73	--	.19	.00
JUL									
10...	--	28	1.7	.0	10	78	66	.18	.00
AUG									
07...	--	18	1.1	.0	10	56	46	.13	.00
SEP									
13...	--	31	2.3	.0	11	84	73	.28	.06

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)
OCT											
18...	1225	.59	75	<1	<.7	<.4	2.8	<.4	2.5	<.4	.05
NOV											
15...	1200	.74	--	--	--	--	--	--	--	--	--
DEC											
13...	1415	11	--	--	--	--	--	--	--	--	--
JAN											
24...	1230	8.1	--	--	--	--	--	--	--	--	--
FEB											
09...	1230	4.6	--	--	--	--	--	--	--	--	--
MAR											
06...	1425	5.2	--	--	--	--	--	--	--	--	--
APR											
04...	1215	9.1	--	--	--	--	--	--	--	--	--
MAY											
08...	1240	579	--	--	--	--	--	--	--	--	--
JUN											
06...	1310	.95	--	--	--	--	--	--	--	--	--
JUL											
10...	1245	1.4	--	--	--	--	--	--	--	--	--
AUG											
07...	1100	47	--	--	--	--	--	--	--	--	--
SEP											
13...	1200	.38	--	--	--	--	--	--	--	--	--

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

ANALYSES OF MINOR ELEMENTS

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
OCT							
18...	1225	.59	1	0	0	<10	0
NOV							
15...	1200	.74	--	--	--	--	--
DEC							
13...	1415	11	--	--	--	--	--
JAN							
24...	1230	8.1	--	--	--	--	--
FEB							
09...	1230	4.6	--	--	--	--	--
MAR							
06...	1425	5.2	--	--	--	--	--
APR							
04...	1215	9.1	1	0	0	10	3
MAY							
08...	1240	579	--	--	--	--	--
JUN							
06...	1310	.95	--	--	--	--	--
JUL							
10...	1245	1.4	--	--	--	--	--
AUG							
07...	1100	47	--	--	--	--	--
SEP							
13...	1200	.38	--	--	--	--	--

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
OCT						
18...	3	0	<.5	0	0	0
NOV						
15...	--	--	--	--	--	--
DEC						
13...	--	--	--	--	--	--
JAN						
24...	--	--	--	--	--	--
FEB						
09...	--	--	--	--	--	--
MAR						
06...	--	--	--	--	--	--
APR						
04...	5	10	<.5	0	2	10
MAY						
08...	--	--	--	--	--	--
JUN						
06...	--	--	--	--	--	--
JUL						
10...	--	--	--	--	--	--
AUG						
07...	--	--	--	--	--	--
SEP						
13...	--	--	--	--	--	--

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

PESTICIDES ANALYSES

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)
OCT										
18...	1225	.59	.0	.00	.0	.00	.00	.00	.00	.00
NOV										
15...	1200	.74	--	--	--	--	--	--	--	--
DEC										
13...	1415	11	--	--	--	--	--	--	--	--
JAN										
24...	1230	8.1	--	--	--	--	--	--	--	--
FEB										
09...	1230	4.6	--	--	--	--	--	--	--	--
MAR										
06...	1425	5.2	--	--	--	--	--	--	--	--
APR										
04...	1215	9.1	--	--	--	--	--	--	--	--
MAY										
08...	1240	579	--	--	--	--	--	--	--	--
JUN										
06...	1310	.95	--	--	--	--	--	--	--	--
JUL										
10...	1245	1.4	--	--	--	--	--	--	--	--
AUG										
07...	1100	47	--	--	--	--	--	--	--	--
SEP										
13...	1200	.38	--	--	--	--	--	--	--	--

DATE	ENDRIN, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
OCT										
18...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
NOV										
15...	--	--	--	--	--	--	--	--	--	--
DEC										
13...	--	--	--	--	--	--	--	--	--	--
JAN										
24...	--	--	--	--	--	--	--	--	--	--
FEB										
09...	--	--	--	--	--	--	--	--	--	--
MAR										
06...	--	--	--	--	--	--	--	--	--	--
APR										
04...	--	--	--	--	--	--	--	--	--	--
MAY										
08...	--	--	--	--	--	--	--	--	--	--
JUN										
06...	--	--	--	--	--	--	--	--	--	--
JUL										
10...	--	--	--	--	--	--	--	--	--	--
AUG										
07...	--	--	--	--	--	--	--	--	--	--
SEP										
13...	--	--	--	--	--	--	--	--	--	--

PESTICIDES ANALYSES OF BOTTOM MATERIAL

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
OCT			
18...	1225	.59	0
NOV			
15...	1200	.74	--
DEC			
13...	1415	11	--
JAN			
24...	1230	8.1	--
FEB			
09...	1230	4.6	--
MAR			
06...	1425	5.2	--
APR			
04...	1215	9.1	--
MAY			
08...	1240	579	--
JUN			
06...	1310	.95	--
JUL			
10...	1245	1.4	--
AUG			
07...	1100	47	--
SEP			
13...	1200	.38	--

SUSPENDED SEDIMENT DISCHARGE

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT					
18...	1225	.62	11.5	4	.01
NOV					
15...	1200	.92	9.5	0	.00
DEC					
13...	1415	11	4.5	9	.27
JAN					
24...	1230	8.1	.0	0	.00
FEB					
09...	1230	4.6	.5	0	.00
MAR					
06...	1425	5.2	4.0	6	.08
APR					
04...	1215	8.9	12.0	1	.02
MAY					
08...	1240	558	11.0	304	458
JUN					
06...	1310	1.0	23.0	2	.01
JUL					
10...	1245	1.4	25.0	1	.00
AUG					
07...	1100	5.8	19.0	1	.02
SEP					
13...	1200	.40	25.0	2	.00

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.5	17.5	15.5	11.5	9.0	8.0	3.0	2.0	1.0	1.0	2.5	2.0
2	18.5	15.5	16.0	10.0	9.0	7.0	1.5	1.5	1.5	.5	2.0	2.0
3	17.5	14.5	18.0	13.0	8.5	7.0	1.5	1.0	1.0	.5	2.0	2.0
4	18.5	13.5	19.0	14.0	8.0	7.0	1.5	1.0	1.0	.5	3.5	2.0
5	18.0	13.0	19.0	14.5	9.0	6.5	1.5	1.0	1.0	.5	2.5	2.0
6	19.0	14.0	16.5	15.5	7.5	5.0	2.0	1.5	1.0	1.0	5.0	2.0
7	17.0	12.5	16.0	15.0	5.0	3.0	3.5	2.0	1.0	1.0	2.0	2.0
8	15.5	14.5	16.5	15.0	3.5	3.0	4.5	2.0	1.0	1.0	2.0	2.0
9	15.5	13.0	17.5	14.0	4.0	3.5	3.0	1.5	1.0	.5	4.0	1.5
10	15.5	12.5	15.5	10.0	4.0	2.0	1.0	1.0	1.0	.0	3.0	1.0
11	14.5	11.5	11.5	8.5	2.5	2.0	1.5	1.0	1.0	.0	5.0	2.0
12	13.0	10.5	10.0	7.0	2.5	2.0	1.5	1.0	1.0	.5	4.5	4.0
13	14.0	11.5	8.5	5.5	4.5	2.5	1.5	1.0	.5	.5	6.0	4.0
14	15.0	11.0	8.5	6.0	5.5	4.0	1.5	1.0	1.0	.5	5.5	4.5
15	15.5	10.0	10.0	6.0	6.5	4.5	2.0	1.0	1.5	1.0	6.0	4.5
16	13.0	11.0	10.0	8.5	5.0	3.5	1.5	1.0	1.5	1.5	5.5	4.0
17	14.0	9.0	10.0	8.5	5.5	3.5	1.0	1.0	2.0	1.5	5.5	3.5
18	13.5	9.5	9.5	7.5	6.0	5.0	1.5	1.0	2.0	2.0	6.0	2.5
19	13.0	9.5	9.5	7.0	6.5	4.5	1.0	1.0	2.0	1.0	8.5	4.0
20	15.0	9.0	9.5	7.5	5.0	4.0	1.0	1.0	1.5	1.0	8.5	4.5
21	15.0	8.5	10.5	9.5	4.0	3.0	1.5	1.0	2.0	1.5	7.5	6.5
22	15.5	9.0	9.5	8.5	2.5	2.0	2.0	.5	1.5	1.0	10.0	5.0
23	16.0	10.0	11.0	8.5	4.0	2.0	.5	.0	1.0	1.0	10.5	6.0
24	16.0	10.0	11.0	8.0	5.5	2.5	.0	.0	2.0	1.0	8.5	7.0
25	14.0	12.0	8.5	6.5	5.0	1.5	3.0	.0	3.0	1.5	7.5	6.5
26	15.5	13.0	6.5	4.0	1.5	1.5	2.0	.5	3.5	1.5	7.0	6.5
27	17.0	12.5	4.0	3.0	1.5	1.5	1.0	.5	3.5	1.5	6.0	6.0
28	16.0	12.0	6.0	4.0	1.5	1.0	1.0	1.0	3.0	1.5	10.0	6.0
29	15.0	10.5	5.0	4.5	1.5	1.0	1.0	1.0	---	---	10.0	6.5
30	15.0	9.5	8.0	5.0	2.0	1.0	1.0	.5	---	---	10.0	5.5
31	15.0	10.0	---	---	4.0	2.0	1.0	.5	---	---	12.0	6.0
MONTH	19.5	8.5	19.0	3.0	9.0	1.0	4.5	.0	3.5	.0	12.0	1.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13.5	9.0	14.0	9.5	25.5	18.0	26.5	22.0	23.5	19.0	21.0	17.5
2	13.0	9.0	15.0	8.5	25.0	19.0	22.0	18.5	25.5	19.0	22.0	17.5
3	13.0	9.0	14.0	9.0	24.5	17.5	20.0	18.0	25.0	20.5	23.0	18.0
4	13.0	10.0	11.0	10.0	24.5	16.0	20.0	18.0	27.0	20.5	24.0	19.0
5	14.0	10.0	11.0	10.0	26.0	16.5	20.5	17.0	22.0	21.0	24.0	18.0
6	13.0	9.5	13.0	9.5	25.0	17.5	24.5	17.5	23.5	19.5	25.0	18.5
7	15.5	10.5	11.0	9.5	22.0	18.5	25.5	19.0	20.5	18.5	25.5	19.0
8	14.0	9.5	11.5	10.5	23.5	19.0	26.0	20.5	22.5	18.5	26.0	20.0
9	15.0	10.0	14.5	11.0	22.5	18.0	25.5	20.5	22.5	19.0	27.5	20.5
10	17.0	11.0	14.5	10.5	23.5	16.0	26.5	21.0	24.5	19.0	27.5	20.5
11	15.0	11.5	16.0	10.0	24.0	17.0	26.5	20.0	21.5	20.0	27.5	20.5
12	15.5	9.5	13.5	13.0	26.0	16.5	27.0	18.5	25.5	20.0	26.5	20.0
13	16.0	10.5	14.0	11.5	19.0	15.5	23.0	19.0	24.0	21.0	28.0	21.5
14	15.0	9.0	11.5	10.5	19.5	14.0	27.5	20.5	27.0	21.0	24.5	19.5
15	16.0	10.5	11.5	10.5	21.0	14.5	25.5	21.0	27.5	21.5	21.0	19.0
16	13.0	9.5	11.0	10.5	22.5	16.5	28.5	20.0	26.0	21.5	20.5	18.0
17	16.0	9.0	15.0	11.0	24.5	18.0	29.5	18.5	29.0	21.5	22.5	18.5
18	14.0	10.5	16.0	11.0	26.5	19.0	29.5	18.5	25.5	21.5	23.5	19.0
19	12.0	10.5	17.5	12.0	22.0	20.0	30.0	19.0	29.5	21.0	23.5	19.5
20	10.5	9.0	18.5	13.0	24.5	19.0	31.0	20.5	25.5	20.5	25.0	20.0
21	9.5	8.5	18.0	14.5	21.5	18.0	32.0	21.5	26.0	19.0	25.0	20.0
22	13.0	8.0	18.5	13.0	23.0	17.5	31.0	22.0	26.5	19.0	21.0	17.5
23	10.0	9.0	17.0	14.5	23.0	16.5	33.0	23.0	28.5	19.5	19.0	16.0
24	15.0	9.0	18.5	15.0	24.5	17.5	27.0	23.0	29.0	20.5	19.0	17.0
25	12.0	10.5	20.0	15.0	24.0	18.5	23.5	22.0	30.0	22.0	21.0	16.0
26	11.0	9.5	22.0	15.0	24.5	19.5	27.0	21.0	28.5	22.0	20.5	14.5
27	14.0	8.5	22.0	15.5	26.0	20.5	25.5	21.5	29.5	21.5	20.5	15.0
28	14.5	9.0	23.0	16.0	27.5	21.5	27.5	20.5	31.0	22.0	20.0	14.5
29	13.5	9.5	23.5	17.0	28.0	21.0	29.0	20.5	26.5	22.0	19.5	13.0
30	14.0	11.0	23.0	18.0	29.5	21.5	26.5	22.0	23.5	21.0	20.5	14.0
31	---	---	25.0	18.0	---	---	22.0	19.0	21.0	18.5	---	---
MONTH	17.0	8.0	25.0	8.5	29.5	14.0	33.0	17.0	31.0	18.5	28.0	13.0
YEAR	33.0	.0										

03237500 OHIO BRUSH CREEK NEAR WEST UNION, OH

LOCATION.--Lat 38°48'13", long 83°25'16", Adams County, Hydrologic Unit 05090201, on right bank at downstream side of bridge on State Highway 348, 0.3 mi (0.5 km) downstream from Cedar Run, 7.0 mi (11.3 km) east of West Union, and 7.1 mi (11.4 km) upstream from Beasley Fork.

DRAINAGE AREA.--387 mi² (1,002 km²).

PERIOD OF RECORD.--August 1926 to November 1935, September 1940 to current year.

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 510.6 ft (155.63 m) National Geodetic Vertical Datum of 1912. Prior to Nov. 22, 1940, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Water-quality data collected at this site 1965 to 1977; Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--47 years, 446 ft³/s (12.63 m³/s), 15.65 in/yr (398 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 59,200 ft³/s (1,680 m³/s) Mar. 10, 1964, gage height, 27.91 ft (8.507 m), from rating curve extended above 22,000 ft³/s (623 m³/s) on basis of slope-area measurement at gage heights 22.70 ft (6.919 m), 26.5 ft (8.077 m), and 27.91 ft (8.507 m); no flow Sept. 13-23, 27, 28, 1955 and for part of each day Sept. 17, 18, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 11,000 ft³/s (312 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 5	1745	17100	484	16.86	5.139	Mar. 13	2130	*23800	674	19.41	5.916
Jan. 8	2300	13100	371	14.89	4.538	Mar. 26	0700	14600	413	15.68	4.779
Jan. 26	1200	23500	666	a*20.01	6.099						

Minimum discharge, 11 ft³/s (0.31 m³/s) Sept. 30.

a Ice jam

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	413	57	4310	60	1300	98	343	176	115	53	184	539
2	696	50	975	56	1000	96	280	145	98	1450	106	209
3	198	46	579	54	750	96	236	126	98	2530	57	118
4	94	43	631	52	580	94	225	579	96	464	41	82
5	62	41	8130	70	480	94	267	969	82	205	33	62
6	46	69	2140	103	410	92	229	488	69	126	587	50
7	41	343	785	195	360	92	240	301	70	89	4100	42
8	51	205	482	7000	310	92	215	1680	105	72	567	36
9	324	153	2120	3760	270	92	179	2960	891	57	214	31
10	218	107	740	913	240	220	167	963	288	50	644	27
11	126	90	470	500	210	1700	164	552	140	240	2750	24
12	82	80	380	400	190	6300	198	397	94	96	866	22
13	65	63	300	320	170	14900	173	2300	112	54	356	20
14	53	53	3580	260	160	18400	134	1930	94	54	198	19
15	45	47	1780	230	150	5160	112	1940	66	54	131	19
16	42	56	790	210	140	2210	103	1800	54	90	97	17
17	40	760	579	200	130	1520	96	2380	46	63	79	34
18	36	441	464	190	120	864	233	924	41	35	67	83
19	33	198	387	180	120	780	975	613	41	27	72	42
20	31	137	329	170	120	880	811	436	36	22	315	28
21	28	891	319	160	120	750	701	507	1520	19	113	24
22	26	918	240	150	110	853	419	367	447	19	59	207
23	24	372	191	140	110	552	297	319	164	16	43	33
24	23	248	182	190	110	413	306	2170	89	25	35	22
25	23	185	240	2500	110	1780	464	790	62	268	41	19
26	201	156	170	16000	100	7040	579	458	343	151	39	16
27	362	126	100	9000	100	1580	352	310	288	63	29	14
28	161	107	88	5000	100	891	252	236	131	39	35	13
29	105	148	72	3200	---	649	201	188	201	27	771	12
30	80	1040	67	2500	---	488	155	161	78	25	473	12
31	67	---	64	1800	---	397	---	140	---	623	1190	---
TOTAL	3796	7230	31676	55563	8070	69173	9136	27305	5959	7106	14292	1876
MEAN	122	241	1022	1792	288	2231	305	881	199	229	461	62.5
MAX	696	1040	8130	16000	1300	18400	975	2960	1520	2530	4100	539
MIN	23	41	64	52	100	92	96	126	36	16	29	12
CFSM	.32	.62	2.64	4.63	.74	5.77	.79	2.28	.51	.59	1.19	.16
IN.	.36	.69	3.04	5.34	.78	6.65	.88	2.62	.57	.68	1.37	.18

CAL YR 1977 TOTAL 121336.4 MEAN 332 MAX 8130 MIN 7.5 CFSM .86 IN 11.66
WTR YR 1978 TOTAL 241182.0 MEAN 661 MAX 18400 MIN 12 CFSM 1.71 IN 23.18

03238500 WHITEOAK CREEK NEAR GEORGETOWN, OH

LOCATION.--Lat 38°51'29", long 83°55'43", Brown County, Hydrologic Unit 05090201, on left bank 150 ft (46 m) upstream from diversion dam for Georgetown water treatment plant, 0.7 mi (1.1 km) upstream from Town Run, 1.4 mi (2.3 km) southwest of Georgetown, and 7.2 mi (11.6 km) upstream from mouth.

DRAINAGE AREA.--218 mi² (565 km²).

PERIOD OF RECORD.--October 1923 to November 1935, October 1939 to current year.

REVISED RECORDS.--WSP 728: 1924-31. WSP 758: 1933. WSP 1908: Drainage area. WRD OH-74-1: 1973 (P)

GAGE.--Water-stage recorder. Datum of gage is 604.20 ft (184.160 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 12, 1972 nonrecording gage at a site 1.0 mi (1.6 km) downstream at datum 35.24 ft (10.741 m) lower. See WSP 2108 for history of changes prior to Dec. 8, 1940.

REMARKS.--Records fair except those for winter periods which are poor. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1970 to 1974.

AVERAGE DISCHARGE.--51 years, 253 ft³/s (7.165 m³/s), 15.76 in/yr (400 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,400 ft³/s (634 m³/s) Mar. 10, 1964; maximum gage height, 20.87 ft (6.361 m), May 14, 1933, site and datum then in use; no flow at times in 1930, 1940-41, 1943, 1948, 1951-53, 1959, 1969, 1970, 1976, 1977, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,500 ft³/s (156 m³/s), and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 5	2330	6930	196	6.80	2.073	Mar. 14	2330	*18200	402	*8.41	2.563
Dec. 14	2400	5970	169	6.49	1.978	Mar. 26	1930	5940	168	6.52	1.987
Jan. 8	2400	7000	198	6.82	2.079						

Minimum discharge, no flow July 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	46	3950	40	900	78	98	74	35	20	99	275
2	1050	39	737	38	680	78	85	63	27	56	47	95
3	144	37	276	36	520	78	70	57	22	440	23	48
4	67	35	297	35	430	76	67	70	18	150	23	38
5	42	32	4120	35	360	76	74	195	17	57	21	21
6	33	38	3160	35	300	76	70	149	16	31	70	18
7	29	83	520	42	250	74	121	85	17	19	121	13
8	67	198	310	3700	230	74	135	566	36	14	109	8.8
9	418	146	1200	2000	200	74	81	2200	958	9.3	47	9.5
10	245	87	400	700	180	113	67	575	216	20	43	5.4
11	191	83	280	400	160	421	60	174	79	70	373	4.0
12	66	66	250	300	140	2310	70	104	47	37	77	5.1
13	49	47	230	230	130	4040	74	1040	33	87	36	3.2
14	38	37	3190	180	120	10000	53	1700	26	52	20	2.9
15	31	32	2260	160	110	8170	47	1370	23	21	44	3.3
16	29	82	435	140	100	1810	41	533	18	18	21	3.1
17	28	994	244	130	96	963	38	1000	13	5.7	10	4.6
18	26	435	189	120	94	444	57	401	11	2.9	9.3	9.1
19	24	145	178	110	92	429	264	191	11	1.5	11	8.1
20	22	92	140	100	90	827	444	120	11	1.0	12	6.8
21	20	1260	180	95	88	739	452	94	11	.77	6.5	5.0
22	22	1140	100	90	86	878	185	89	318	.20	4.0	5.1
23	22	283	66	86	84	252	126	127	125	.00	3.0	2.9
24	20	174	58	110	82	149	185	1390	48	3.0	3.9	3.2
25	23	140	77	800	82	492	429	413	26	225	5.1	2.1
26	574	113	66	10000	80	4240	452	184	22	95	2.4	3.0
27	456	96	58	6000	80	729	185	103	118	35	3.0	3.0
28	166	81	52	4500	78	321	108	77	47	17	2.5	3.0
29	96	85	48	2700	---	195	85	63	52	9.8	1390	2.1
30	70	1020	45	1800	---	149	77	52	41	8.7	382	2.9
31	57	---	42	1300	---	117	---	42	---	15	971	---
TOTAL	4068	7146	23158	36012	5842	38472	4298	14681	2442	1513.67	3909.7	606.2
MEAN	131	238	747	1162	209	1241	143	474	81.4	48.8	126	20.2
MAX	1050	1260	4120	10000	900	10000	452	2200	958	440	1390	275
MIN	20	32	42	35	78	74	38	42	11	.00	2.4	2.1
CFSM	.60	1.09	3.43	5.33	.96	5.69	.66	2.17	.37	.22	.58	.09
IN.	.69	1.22	3.95	6.15	1.00	6.56	.73	2.51	.42	.26	.67	.10

CAL YR 1977 TOTAL 81397.08 MEAN 223 MAX 4120 MIN .09 CFSM 1.02 IN 13.89
WTR YR 1978 TOTAL 142148.77 MEAN 389 MAX 10000 MIN .00 CFSM 1.78 IN 24.26

03240000 LITTLE MIAMI RIVER NEAR OLDTOWN, OH

LOCATION.--Lat 39°44'54", long 83°55'53", in sec. 34, R.7, T.4, Greene County, Hydrologic Unit 05090202, on right bank at downstream side of bridge on U.S. Highway 68, 0.8 mi (1.3 km) downstream from Conner Branch, 0.9 mi (1.4 km) upstream from Massies Creek, 1.3 mi (2.1 km) northeast of Oldtown, and at mile 82.25 (132.3 km).

DRAINAGE AREA.--129 mi² (334 km²).

PERIOD OF RECORD.--July 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 816.56 ft (248.887 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good, except those for the winter period, which are fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1952 to 1958.

AVERAGE DISCHARGE.--26 years, 108 ft³/s (3.059 m³/s), 11.37 in/yr (289 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,800 ft³/s (419 m³/s) Jan. 21, 1959, gage height, 12.20 ft (3.719 m), from rating curve extended above 4,400 ft³/s (125 m³/s) on basis of slope-area measurements of peak flow; minimum, 5.4 ft³/s (0.15 m³/s) July 29, 1954, result of temporary storage at rock dam upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 800 ft³/s (22.7 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 15	0445	1240	35.1	5.69	1.734	Mar. 22	0115	818	23.2	4.55	1.387
Mar. 15	0445	*2740	77.6	*8.67	2.643	Mar. 26	1300	883	25.0	4.74	1.445

Minimum discharge, 8.2 ft³/s (0.232 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	23	177	74	118	45	220	146	89	38	31	73
2	43	22	183	69	112	44	189	133	84	74	30	48
3	29	22	124	56	110	43	169	124	81	90	44	30
4	21	22	117	52	105	43	167	126	76	66	29	30
5	18	23	158	48	100	43	156	128	74	55	19	21
6	20	22	294	60	98	43	171	120	71	49	22	24
7	18	23	146	92	96	43	205	110	77	49	35	23
8	23	23	150	396	93	44	179	119	87	46	33	18
9	29	23	120	313	90	44	158	131	201	44	21	18
10	31	22	94	160	86	46	146	117	133	44	32	18
11	27	21	117	140	82	55	158	105	100	43	27	18
12	24	21	108	125	78	94	146	107	89	38	45	18
13	22	21	95	115	76	226	128	224	84	40	25	18
14	21	21	706	108	74	1690	115	337	74	49	24	16
15	20	23	1040	102	70	2140	108	328	70	40	22	17
16	20	27	486	96	68	1080	103	253	63	36	24	20
17	20	41	342	94	64	712	98	226	59	33	22	19
18	20	44	280	90	60	475	139	195	56	30	20	19
19	21	37	220	86	58	452	333	169	66	24	21	17
20	21	33	207	75	57	498	368	152	59	24	24	17
21	21	49	179	72	56	674	301	145	59	23	21	17
22	20	63	143	70	55	646	237	129	54	20	19	16
23	20	52	120	72	54	486	205	137	49	21	18	15
24	18	45	112	86	54	455	224	167	48	36	18	15
25	21	40	98	126	53	417	313	156	45	32	16	14
26	26	36	90	191	50	791	441	133	48	33	21	14
27	27	31	82	170	48	602	285	119	46	30	16	10
28	24	33	78	150	46	425	218	110	46	27	24	13
29	22	31	72	140	---	342	185	103	41	23	21	13
30	21	43	67	130	---	278	165	98	38	30	33	13
31	23	---	76	122	---	246	---	97	---	36	90	---
TOTAL	713	937	6281	3680	2111	13222	6030	4744	2167	1223	847	622
MEAN	23.0	31.2	203	119	75.4	427	201	153	72.2	39.5	27.3	20.7
MAX	43	63	1040	396	118	2140	441	337	201	90	90	73
MIN	18	21	67	48	46	43	98	97	38	20	16	10
CFSM	.18	.24	1.57	.92	.58	3.31	1.56	1.19	.56	.31	.21	.16
IN.	.21	.27	1.81	1.06	.61	3.81	1.74	1.37	.62	.35	.24	.18

CAL YR 1977 TOTAL 23398.6 MEAN 63.9 MAX 1040 MIN 9.3 CFSM .50 IN 6.72
WTR YR 1978 TOTAL 42577.0 MEAN 117 MAX 2140 MIN 10 CFSM .91 IN 12.28

03241500 MASSIES CREEK AT WILBERFORCE, OH

LOCATION.--Lat 39°43'22", long 83°52'58", Greene County, Hydrologic Unit 05090202, on right bank 200 ft (61 m) downstream from bridge on Wilberforce-Clifton Road, 0.5 mi (0.8 km) northwest of Wilberforce, 0.6 mi (1.0 km) downstream from unnamed right bank tributary and 1.7 mi (2.7 km) upstream from Clark Run.

DRAINAGE AREA.--63.2 mi² (164 km²).

PERIOD OF RECORD.--September 1952 to current year. Prior to October 1962, published as Massie Creek at Wilberforce.

REVISIONS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 865.15 ft (263.698 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 4, 1972 at site 150 ft (46 m) upstream at same datum.

REMARKS.--Records good except those for the winter period and no gage height record, which are fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1952 to 1958.

AVERAGE DISCHARGE.--26 years, 59.1 ft³/s (1.673 m³/s), 12.70 in/yr (323 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,300 ft³/s (207 m³/s) Jan. 21, 1959, Mar. 4, 1963, gage height, 11.25 ft (3.429 m), from rating curve extended above 3,100 ft³/s (87.8 m³/s); minimum, 0.3 ft³/s (0.008 m³/s) Sept. 3-7, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft³/s (17.0 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 15	---	650	18.4	---	---	Mar. 15	0630	*1480	41.9	*706	2.152

Minimum, 2.6 ft³/s (0.074 m³/s) Sept. 26, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	7.8	65	36	60	21	107	65	35	19	13	26
2	19	7.6	94	33	57	21	87	58	33	27	13	18
3	14	7.8	72	31	54	20	78	54	32	39	15	13
4	12	7.8	58	30	52	20	71	56	29	30	11	11
5	10	7.8	84	29	50	20	65	56	28	24	8.8	8.7
6	11	7.8	170	30	49	20	66	48	27	22	9.7	7.4
7	9.4	8.8	100	45	48	20	68	44	30	21	18	6.6
8	13	10	76	242	46	20	62	49	107	19	12	5.9
9	17	10	63	215	43	22	57	57	224	18	10	5.0
10	19	11	49	135	40	24	54	52	129	18	11	4.6
11	16	11	60	100	39	27	58	47	84	17	11	4.6
12	13	10	54	87	38	56	51	48	65	15	11	4.3
13	11	10	47	70	37	154	46	153	55	16	10	4.6
14	12	11	256	56	36	471	41	206	45	17	8.8	4.9
15	10	12	520	48	32	1340	38	231	39	15	7.7	4.8
16	9.4	14	380	45	31	810	37	171	36	14	7.2	6.8
17	8.8	16	250	38	29	516	36	148	33	12	6.7	5.8
18	8.9	20	190	35	28	331	51	120	30	12	6.3	5.0
19	8.8	18	153	31	27	314	169	97	32	11	7.2	4.3
20	8.4	17	149	29	28	342	198	85	29	11	11	3.9
21	7.9	25	125	29	26	454	151	77	29	10	7.8	3.8
22	7.4	29	97	29	25	405	113	67	27	9.2	6.3	3.3
23	6.8	25	79	30	25	292	97	69	25	9.4	5.8	3.0
24	6.6	21	70	31	24	265	108	71	23	14	5.1	3.0
25	7.3	18	64	52	24	246	164	64	23	12	4.9	3.2
26	10	17	58	119	23	471	223	57	24	11	4.5	2.9
27	9.7	16	54	90	22	348	142	52	22	10	4.6	3.0
28	9.4	15	50	80	22	233	105	48	21	9.2	7.5	3.2
29	8.4	15	47	73	---	178	96	45	20	9.0	6.0	3.2
30	8.0	20	43	68	---	142	75	42	19	12	13	3.6
31	7.7	---	40	63	---	123	---	39	---	12	27	---
TOTAL	333.9	*426.4	3611	2029	1015	8226	2702	2478	1355	494.8	300.9	187.4
MEAN	10.8	14.3	116	65.5	36.3	265	90.1	79.9	45.2	16.0	9.71	6.25
MAX	19	29	520	242	60	1340	223	231	224	39	27	26
MIN	6.6	7.6	40	29	22	20	36	39	19	9.0	4.5	2.9
CFSM	.17	.23	1.84	1.04	.57	4.19	1.43	1.26	.72	.25	.15	.10
IN.	.20	.25	2.13	1.19	.60	4.84	1.59	1.46	.80	.29	.18	.11

CAL YR 1977 TOTAL 11746.3 MEAN 32.2 MAX 520 MIN 2.6 CFSM .51 IN 6.91
WTR YR 1978 TOTAL 23161.4 MEAN 63.5 MAX 1340 MIN 2.9 CFSM 1.01 IN 13.63

Note: No gage-height record Nov. 11 to Dec. 19.

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OH

LOCATION.--Lat 39°35'00, long 84°01'49", Greene County, Hydrologic Unit 05090202, on right bank at downstream side of bridge on New Burlington Road, 0.3 mi (0.5 km) upstream from unnamed right bank tributary, 2.2 mi (3.5 km) southwest of Spring Valley, 2.8 mi (4.5 km) downstream from Glady Run, and at mile 61.95 (99.68 km).

DRAINAGE AREA.--366 mi² (948 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1925 to December 1935 and October 1939 to December 1951 (published as "at Spring Valley"), July 1968 to current year.

REVISED RECORDS.--WSP 893: 1932(M). WSP 1053: 1929. WSP 2108: 1969.

GAGE.--Water-stage recorder. Datum of gage is 729.29 ft (222.288 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 12, 1939, nonrecording gage and Dec. 13, 1939 to Dec. 31, 1951, water-stage recorder at site 2.5 mi (4.0 km) upstream at datum 8.6 ft (2.62 m) higher.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--32 years (1925-35, 1939-51, 1969-78), 379 ft³/s (10.73 m³/s), 14.06 in/yr (357 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,400 ft³/s (521 m³/s) Feb. 26, 1929, gage height, 16.8 ft (5.12 m) site and datum then in use; minimum, 23 ft³/s (0.65 m³/s) July 27, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959 reached a stage of 18.1 ft (5.52 m) at present site and datum, discharge, 36,400 ft³/s (1,030 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, about 7,200 ft³/s (205 m³/s) Mar. 15, above base of 3,600 ft³/s (102 m³/s); minimum, 83 ft³/s (2.35 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	217	93	687	254	380	154	567	489	251	153	134	307
2	169	92	579	243	360	155	508	379	244	281	129	194
3	122	92	437	213	340	156	465	356	240	391	258	151
4	107	91	372	207	315	158	447	364	221	240	154	132
5	101	91	486	231	300	158	433	380	215	197	124	125
6	106	91	1060	228	285	158	448	347	207	178	118	123
7	101	94	526	304	275	160	485	321	245	166	163	120
8	145	99	413	1250	260	166	444	338	323	159	146	116
9	143	94	418	1020	245	186	407	419	708	150	129	112
10	122	99	551	770	230	215	393	357	465	147	207	110
11	117	98	596	620	220	274	441	322	344	144	149	108
12	112	92	523	510	210	464	413	318	297	138	422	107
13	108	91	485	450	205	852	367	695	383	145	209	106
14	104	90	2480	400	200	3510	340	906	247	158	142	105
15	100	92	3300	355	195	6900	320	889	226	145	138	105
16	98	120	985	330	190	3700	306	715	215	133	127	288
17	95	190	881	325	186	2030	297	633	201	125	134	168
18	96	144	764	315	182	1290	425	548	189	124	118	120
19	94	128	656	290	180	1130	764	473	257	124	119	114
20	95	119	596	275	180	1210	958	424	208	119	168	110
21	94	213	500	260	176	1480	791	429	249	119	108	106
22	91	211	457	242	170	1510	627	376	198	119	92	103
23	90	180	399	239	168	1100	564	396	176	113	92	101
24	88	155	371	240	165	994	604	451	168	228	98	99
25	93	137	350	404	162	1090	773	410	161	177	103	97
26	143	127	336	932	155	1960	1090	363	193	132	101	97
27	105	119	320	800	155	1470	745	328	168	125	104	97
28	98	117	305	530	155	1020	584	300	169	118	184	94
29	96	117	292	520	---	813	587	284	155	115	130	94
30	93	231	278	470	---	685	456	272	149	227	202	94
31	91	---	263	420	---	616	---	263	---	163	480	---
TOTAL	3434	3707	20586	13647	6244	35764	15961	13465	7384	5045	4974	3803
MEAN	111	124	664	440	223	1154	532	434	246	163	160	127
MAX	217	231	3300	1250	380	6900	1090	906	708	391	480	307
MIN	88	90	263	207	155	154	297	263	149	113	92	94
CFSM	.30	.34	1.81	1.20	.61	3.15	1.45	1.19	.67	.45	.44	.35
IN.	.35	.38	2.09	1.39	.63	3.64	1.62	1.37	.75	.51	.51	.39

CAL YR 1977 TOTAL 77787 MEAN 213 MAX 3300 MIN 71 CFSM .58 IN 7.91
WTR YR 1978 TOTAL 134014 MEAN 367 MAX 6900 MIN 88 CFSM 1.00 IN 13.62

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1968 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: September 1968 to current year.
pH: September 1968 to current year.
WATER TEMPERATURES: September 1968 to current year.
DISSOLVED OXYGEN: September 1968 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. Dissolved oxygen concentrations listed as 15.0 mg/L represent concentrations of 15.0 mg/L or higher due to instrument limitations prior to February 28, 1978; 20.0 mg/L limitation thereafter.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,570 micromhos Feb. 1, 1971; minimum, 161 micromhos July 8, 1975.
pH: Maximum, 9.2 units Dec. 30, 1971; minimum, 6.6 units Nov. 29, 1972, July 11, 12, 1974.
WATER TEMPERATURES: Maximum, 34.5°C June 26, 1971; minimum, 0.0°C on many days during winter periods.
DISSOLVED OXYGEN: Maximum, 16.7 mg/L Mar. 2-5, 1978; minimum, 1.0 mg/L July 29, 1974.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,480 micromhos Mar. 10; minimum, 241 micromhos Mar. 14.
pH: Maximum recorded, 8.5 units Mar. 9; minimum recorded, 7.2 Jan. 14.
WATER TEMPERATURES: Maximum, 26.5°C June 27, 28; minimum, 0.0°C Jan. 14, 17, 18, 23, Feb. 3.
DISSOLVED OXYGEN: Maximum, 16.7 mg/L Mar. 2-5; minimum, 3.0 mg/L Oct. 1.

REVISIONS.--The maximum and minimum pH values for the period October 1971 through April 1972 are deleted. The minimum pH value for water year 1972 has been revised to 6.8 units May 30 superseding value previously published.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	993	393	1010	978	711	585	858	837	789	765	921	894
2	699	405	1020	999	765	708	909	834	795	774	930	894
3	801	654	1010	990	804	768	936	912	816	795	957	885
4	980	810	1010	987	813	786	933	906	828	807	978	897
5	945	903	1020	990	825	495	915	888	837	807	1060	993
6	963	918	1020	993	693	606	930	885	846	816	1000	933
7	1010	885	1020	975	795	693	1040	582	882	843	1020	933
8	930	882	1020	984	837	801	663	492	870	831	975	918
9	900	687	987	963	1040	828	669	522	882	849	1040	921
10	867	771	987	960	1050	963	795	675	888	864	1480	1040
11	924	861	1010	945	960	900	810	792	888	867	1180	963
12	939	927	993	918	915	885	822	810	888	852	1010	837
13	960	942	1010	978	1240	888	825	798	885	855	825	648
14	969	951	1010	987	1280	408	819	804	906	858	618	241
15	984	960	1010	987	486	450	864	825	948	861	---	---
16	993	969	1010	903	645	492	891	852	984	894	408	333
17	993	969	897	675	711	648	912	846	915	885	501	414
18	1010	972	822	729	744	714	867	846	918	888	594	507
19	1010	993	897	831	765	720	879	855	918	882	603	597
20	1010	990	924	897	771	759	867	840	903	885	600	546
21	1010	993	921	492	786	768	876	846	915	882	567	486
22	1010	981	792	579	807	786	906	876	912	882	549	477
23	993	969	861	798	822	810	906	888	915	885	612	558
24	1010	966	897	855	846	825	900	858	915	888	630	612
25	1020	987	906	882	885	765	975	852	924	894	654	555
26	1040	980	927	903	822	780	1010	765	924	888	540	504
27	870	738	939	912	843	822	774	726	897	873	612	513
28	951	852	951	912	876	849	729	693	921	891	672	612
29	990	921	1030	951	882	858	726	711	---	---	699	672
30	1010	972	1080	798	867	846	744	729	---	---	720	696
31	1020	984	---	---	864	846	762	747	---	---	738	717
MONTH	1040	393	1080	492	1280	408	1040	492	984	765	1480	241

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	750	729	783	747	831	804	891	777	915	813	771	543
2	759	738	783	753	834	810	834	603	948	909	891	780
3	774	758	786	756	846	816	690	438	936	492	927	861
4	801	758	792	765	849	825	753	630	822	582	954	888
5	798	738	807	756	852	831	819	756	909	831	978	915
6	780	729	795	780	867	834	858	828	951	909	1040	972
7	756	726	804	783	849	795	873	858	939	831	1060	975
8	774	744	813	783	852	531	879	858	921	807	1040	978
9	780	758	789	717	690	444	885	858	918	870	1040	987
10	777	753	774	738	---	---	915	852	948	600	1050	981
11	780	726	789	762	---	---	942	915	834	615	1060	984
12	765	717	798	771	---	---	951	909	858	357	1040	996
13	780	756	783	561	---	---	951	894	741	522	1070	1000
14	795	765	648	609	819	813	939	867	918	759	1060	999
15	804	774	693	651	840	825	906	870	933	912	1060	1010
16	804	771	735	699	852	834	927	891	966	912	1070	333
17	801	771	750	726	858	837	933	885	978	924	789	525
18	798	594	759	741	852	834	942	912	963	927	963	807
19	669	573	777	750	846	654	978	921	981	933	987	948
20	669	567	777	756	825	744	972	927	966	651	1050	996
21	714	618	813	717	825	720	987	936	897	717	1060	999
22	744	714	798	762	804	690	990	936	969	903	1060	1010
23	750	732	804	762	852	810	996	942	1020	960	1070	1010
24	774	711	747	720	861	843	978	654	1030	972	1100	1010
25	738	615	783	735	867	846	768	627	1050	990	1100	1020
26	654	606	801	759	891	816	906	783	1050	978	1100	1020
27	723	660	804	777	846	774	936	906	1040	969	1110	1050
28	753	726	798	771	849	825	963	921	1010	675	1120	1050
29	762	738	795	780	861	837	975	921	849	657	1120	1060
30	765	744	810	792	876	858	933	537	909	654	1130	1040
31	---	---	825	795	---	---	825	585	795	489	---	---
MONTH	804	567	825	561	891	444	996	438	1050	357	1130	333
YEAR	1480	241										

LITTLE MIAMI RIVER BASIN

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OH--Continued

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.4	8.0	7.8	7.7	7.8	7.3	8.0	7.9	---	---	8.4	8.2
2	8.3	7.9	7.8	7.7	8.0	7.9	8.0	7.9	---	---	8.4	8.3
3	8.0	7.8	7.8	7.7	8.0	7.9	7.9	7.6	---	---	8.4	8.2
4	8.3	7.8	7.8	7.7	8.1	8.0	7.8	7.6	---	---	8.4	8.3
5	8.4	8.2	7.7	7.7	8.1	7.8	7.8	7.7	---	---	8.4	8.3
6	8.3	8.2	7.7	7.7	8.1	8.0	7.7	7.7	---	---	8.4	8.2
7	8.3	8.2	7.7	7.7	8.0	7.7	7.7	7.6	---	---	8.4	8.2
8	8.2	7.9	7.7	7.6	7.9	7.8	7.7	7.5	---	---	8.4	8.2
9	8.0	7.9	7.7	7.6	8.1	7.9	7.8	7.8	---	---	8.5	8.2
10	8.1	7.9	7.9	7.7	8.1	7.7	7.8	7.6	8.0	7.7	8.4	8.2
11	8.1	8.0	7.9	7.8	7.8	7.5	7.8	7.5	8.1	7.8	8.4	8.2
12	8.2	8.1	7.9	7.9	7.7	7.6	7.8	7.6	8.1	7.7	8.3	8.1
13	8.1	8.0	8.0	7.9	7.8	7.6	7.7	7.4	8.1	8.0	8.2	8.0
14	8.1	7.9	7.9	7.8	7.8	7.5	7.8	7.2	8.2	7.9	8.0	7.8
15	8.1	7.9	7.9	7.8	7.9	7.8	8.0	7.8	8.2	7.8	---	---
16	8.0	7.9	7.8	7.7	8.0	7.8	8.0	7.8	8.1	7.9	7.9	7.4
17	8.0	7.9	7.7	7.6	8.1	8.0	7.9	7.9	8.2	7.9	7.9	7.3
18	8.1	7.9	8.0	7.7	8.1	8.1	8.0	7.7	8.2	7.9	8.0	7.8
19	7.8	7.8	8.0	7.9	8.2	8.1	8.0	7.9	8.2	7.7	8.0	7.9
20	7.9	7.8	7.9	7.8	8.3	8.2	8.0	7.9	8.2	7.8	8.0	7.9
21	7.9	7.8	7.8	7.4	8.3	8.2	8.0	7.9	8.4	7.8	8.0	8.0
22	7.9	7.8	7.8	7.6	8.2	8.1	8.1	7.7	8.4	8.2	8.0	7.8
23	8.0	7.9	7.9	7.5	8.1	7.9	8.0	7.6	8.4	8.2	8.0	8.0
24	8.0	7.9	7.6	7.5	8.0	7.9	8.0	7.8	8.3	8.2	8.1	8.0
25	7.9	7.8	7.6	7.4	8.1	7.9	7.9	7.8	8.4	8.2	8.1	8.0
26	7.8	7.6	7.7	7.5	8.0	7.7	---	---	8.4	8.2	8.0	8.0
27	7.7	7.5	7.8	7.6	8.0	7.6	---	---	8.4	8.2	8.1	8.0
28	7.8	7.7	8.1	7.6	8.0	7.9	---	---	8.4	8.2	8.1	7.9
29	7.9	7.8	8.1	8.0	8.0	7.8	---	---	---	---	8.1	8.0
30	7.9	7.8	8.0	7.6	8.0	7.9	---	---	---	---	8.1	8.0
31	7.9	7.8	---	---	8.0	7.9	---	---	---	---	8.1	7.9
MONTH	8.4	7.5	8.1	7.4	8.3	7.3	8.1	7.2	8.4	7.7	8.5	7.3

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.1	8.0	8.3	8.2	8.1	7.9	8.1	8.0	8.1	8.0	8.0	7.8
2	8.2	8.1	8.3	8.2	8.1	7.9	8.1	7.8	8.2	8.0	8.1	7.8
3	8.2	7.9	8.3	8.2	8.1	8.0	8.0	7.7	8.2	7.7	8.1	7.8
4	8.1	8.0	8.2	8.1	8.1	8.0	8.1	7.9	8.1	7.9	8.0	7.8
5	8.2	8.0	8.2	8.0	8.1	7.9	8.1	8.0	8.2	8.1	8.0	7.7
6	8.2	8.1	8.3	8.1	8.1	7.9	8.1	7.9	8.1	8.0	8.0	7.7
7	8.2	8.0	8.2	8.2	8.1	7.9	8.1	7.9	8.2	8.0	8.0	7.8
8	8.2	8.2	8.2	8.1	8.0	7.8	8.1	8.0	8.2	8.0	7.9	7.7
9	8.3	8.2	8.2	8.0	8.1	7.7	8.1	8.0	8.2	7.8	8.0	7.7
10	8.2	8.0	8.2	8.1	---	---	8.1	8.0	8.0	7.6	7.9	7.8
11	8.2	8.1	8.2	8.1	---	---	8.1	8.0	7.9	7.7	8.0	7.8
12	8.2	8.1	8.2	8.1	---	---	8.2	8.0	7.9	7.6	8.0	7.9
13	8.3	8.2	8.1	7.8	---	---	8.2	8.1	7.8	7.6	8.0	7.8
14	8.3	8.2	8.2	8.1	8.1	7.9	8.2	7.9	7.9	7.7	8.0	7.9
15	8.3	8.1	8.2	8.1	8.1	7.9	8.2	8.1	7.9	7.7	8.0	7.8
16	8.4	8.2	8.2	8.1	8.1	7.9	8.2	8.1	7.9	7.8	8.0	7.7
17	8.4	8.2	8.2	8.1	8.0	7.8	8.2	8.1	7.9	7.7	7.9	7.7
18	8.4	7.8	8.3	8.0	8.0	7.9	8.2	8.1	7.9	7.8	7.9	7.8
19	8.2	8.0	8.2	8.0	8.0	7.7	8.3	8.1	7.9	7.8	7.9	7.7
20	8.2	8.1	8.2	8.0	8.0	7.9	8.3	8.1	8.0	7.7	8.0	7.7
21	8.2	8.1	8.2	8.0	8.0	7.8	8.3	8.1	8.0	7.8	8.0	7.8
22	8.2	8.1	8.2	8.0	8.1	7.9	8.3	8.0	8.0	7.8	8.1	8.0
23	8.2	8.2	8.2	8.0	8.1	7.9	8.3	8.0	8.0	7.8	8.1	7.9
24	8.2	8.1	8.1	8.0	8.1	7.9	8.2	7.9	8.0	7.8	8.1	7.8
25	8.2	8.1	8.1	8.0	8.1	7.9	8.0	7.8	8.0	7.8	8.1	7.9
26	8.2	8.1	8.2	7.9	8.1	7.8	8.1	7.9	8.0	7.8	8.2	7.9
27	8.3	8.1	8.1	7.9	8.0	7.9	8.2	8.1	8.0	7.8	8.2	8.0
28	8.3	8.1	8.1	7.9	8.1	7.9	8.2	8.0	8.0	7.7	8.1	8.0
29	8.2	8.1	8.1	7.9	8.1	8.0	8.2	8.0	7.9	7.7	8.2	7.9
30	8.3	8.1	8.1	7.9	8.1	7.9	8.1	8.0	8.0	7.9	8.1	8.1
31	---	---	8.1	7.9	---	---	8.1	7.9	7.9	7.7	---	---
MONTH	8.4	7.8	8.3	7.8	8.1	7.7	8.3	7.7	8.2	7.6	8.2	7.7
YEAR	8.5	7.2										

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.0	17.5	14.5	13.0	7.5	6.0	3.5	2.5	.5	.5	4.0	2.5
2	18.5	16.0	15.0	12.5	6.0	5.5	2.5	1.0	.5	.5	2.5	1.0
3	15.5	14.0	15.5	14.5	6.0	5.5	1.0	.5	.5	.0	3.0	1.0
4	14.5	12.5	16.0	15.5	6.0	5.0	1.5	.5	.5	.5	3.5	1.5
5	14.5	12.5	17.0	15.5	5.0	4.0	2.5	1.0	.5	.5	3.0	.5
6	16.0	14.0	17.0	16.5	4.0	1.5	3.5	2.5	.5	.5	5.0	1.5
7	14.0	12.5	16.5	16.0	1.5	.5	4.5	2.5	.5	.5	4.5	2.5
8	14.0	13.0	16.5	15.5	.5	.5	3.5	2.5	.5	.5	2.5	2.0
9	14.0	12.5	16.5	15.5	1.0	.5	2.0	.5	.5	.5	4.5	2.0
10	13.0	11.5	16.0	10.5	.5	.5	.5	.5	.5	.5	6.0	3.0
11	12.0	10.5	10.5	8.0	.5	.5	.5	.5	.5	.5	5.5	3.5
12	11.0	10.0	7.5	6.0	.5	.5	.5	.5	1.5	.5	4.5	3.0
13	11.5	9.5	6.0	4.5	3.0	.5	.5	.5	1.5	1.0	4.0	2.5
14	11.5	9.5	6.5	5.0	4.0	2.0	.5	.0	2.5	1.0	3.0	.5
15	11.5	9.5	8.0	6.0	4.0	3.5	.5	.5	1.5	.5	---	---
16	11.0	10.0	10.0	8.0	5.0	3.5	.5	.5	2.5	1.0	2.5	1.0
17	10.5	8.5	10.0	9.0	7.0	5.0	.5	.0	3.5	2.0	2.5	1.5
18	11.0	9.0	8.5	6.5	7.5	7.0	.5	.0	3.0	1.5	3.5	1.5
19	11.0	10.0	6.5	5.5	7.5	6.5	.5	.5	1.5	.5	5.0	3.5
20	11.5	9.5	8.5	6.0	7.0	5.5	.5	.5	1.5	.5	5.5	3.5
21	12.0	9.5	10.5	8.5	5.5	3.5	1.5	.5	2.5	.5	6.5	5.5
22	13.0	10.5	8.5	7.0	3.0	2.0	.5	.5	2.5	1.0	6.5	4.5
23	13.5	12.0	8.0	6.5	3.0	2.0	.5	.0	2.0	.5	7.5	6.5
24	13.5	11.5	8.0	7.0	4.5	3.0	.5	.5	3.5	1.5	7.0	4.5
25	13.5	13.0	7.0	5.5	5.0	2.0	2.0	.5	3.5	2.5	5.5	4.0
26	14.5	13.5	5.0	2.5	2.0	.5	.5	.5	3.5	2.0	5.5	5.5
27	14.5	14.0	2.5	1.5	1.0	.5	.5	.5	3.0	1.0	5.5	5.0
28	14.0	13.0	3.0	1.5	.5	.5	.5	.5	4.0	1.5	8.0	4.5
29	13.0	11.5	4.0	3.0	1.5	.5	.5	.5	---	---	9.5	7.5
30	12.5	10.5	6.0	4.0	2.5	1.5	.5	.5	---	---	9.5	7.5
31	13.0	11.5	---	---	3.5	2.5	.5	.5	---	---	11.0	8.5
MONTH	19.0	8.5	17.0	1.5	7.5	.5	4.5	.0	4.0	.0	11.0	.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13.5	11.0	14.0	12.0	23.0	20.0	24.5	22.0	22.5	19.5	20.0	18.0
2	13.0	10.0	14.0	11.0	22.0	20.5	22.0	20.5	23.0	20.5	20.5	18.0
3	11.5	9.0	14.0	11.5	21.5	19.0	21.0	20.0	22.5	21.5	20.5	18.0
4	12.5	11.0	13.0	11.0	19.5	18.0	21.0	19.0	22.5	20.0	21.0	18.5
5	13.5	11.0	11.0	10.5	20.5	18.0	21.0	19.0	21.0	19.0	20.5	17.5
6	12.5	12.0	12.0	10.0	20.0	18.0	22.0	18.5	19.5	19.0	21.0	18.0
7	14.0	11.5	11.5	11.0	20.0	18.5	23.5	20.5	21.0	19.0	21.5	19.0
8	13.5	12.0	13.0	11.0	20.5	19.0	24.5	21.5	21.5	18.5	22.5	19.5
9	12.5	11.0	15.0	13.0	20.0	18.5	23.5	21.5	23.0	19.5	23.0	20.0
10	14.5	11.5	15.5	13.0	---	---	23.5	22.0	22.5	21.0	23.0	20.5
11	15.0	13.0	16.5	13.5	---	---	22.0	19.5	21.5	20.5	22.5	21.0
12	14.0	11.5	16.0	15.5	---	---	21.5	18.5	21.5	20.5	22.0	20.5
13	14.5	12.5	15.5	14.5	---	---	21.0	19.5	22.5	20.0	22.0	20.5
14	13.0	11.0	14.0	11.5	19.0	18.5	24.0	20.5	23.5	20.5	21.5	21.0
15	13.5	11.0	12.0	11.0	18.5	17.0	23.5	21.5	24.0	21.0	22.0	20.0
16	12.0	11.0	12.5	11.5	20.0	17.0	24.0	21.0	24.0	22.0	21.0	19.5
17	12.5	9.5	14.5	12.0	22.0	19.0	23.5	20.0	24.0	21.0	21.0	19.5
18	12.0	11.0	16.5	14.0	23.5	20.5	23.5	20.0	24.0	21.5	22.5	20.0
19	11.5	10.5	19.0	16.0	24.0	21.0	24.5	20.5	24.0	22.0	23.5	21.0
20	10.5	8.5	19.5	17.5	23.0	20.5	25.0	22.0	23.0	20.5	23.5	21.5
21	8.0	7.5	18.5	16.0	22.5	21.0	24.5	23.0	22.0	19.0	23.5	21.5
22	10.0	6.5	16.0	14.0	21.5	19.0	26.0	23.0	22.0	18.5	22.5	19.0
23	10.0	9.5	16.0	15.0	21.0	18.5	25.5	23.5	22.5	19.0	18.5	16.5
24	12.0	9.0	16.5	16.0	22.5	19.0	24.0	21.5	23.5	20.5	19.0	17.0
25	12.0	10.0	18.5	15.5	22.5	20.0	22.0	21.0	23.5	21.5	18.5	16.5
26	11.0	9.0	20.0	17.0	23.0	20.5	24.0	20.5	23.0	22.0	17.0	15.0
27	12.5	10.0	21.0	18.0	26.0	22.0	24.0	22.0	23.0	21.0	17.0	14.5
28	13.5	11.5	21.5	19.0	26.5	23.0	24.0	21.0	23.0	21.0	17.0	15.5
29	13.5	12.5	22.0	19.5	26.5	23.5	23.0	21.0	23.0	21.5	16.0	14.0
30	15.0	13.0	21.5	20.0	26.0	23.0	22.0	20.0	22.0	19.5	15.5	14.5
31	---	---	22.5	19.5	---	---	21.5	19.0	19.0	18.5	---	---
MONTH	15.0	6.5	22.5	10.0	26.5	17.0	26.0	18.5	24.0	18.5	23.5	14.0
YEAR	26.5	.0										

LITTLE MIAMI RIVER BASIN

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OH--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	6.1	3.0	8.0	6.2	10.3	9.6	13.4	12.9	13.1	12.7	16.3	13.1
2	5.8	4.6	8.2	6.1	10.9	10.4	13.6	13.2	13.1	12.5	16.7	14.1
3	7.8	5.8	7.7	5.9	11.1	10.7	13.8	13.4	13.3	12.8	16.7	13.5
4	7.8	7.1	6.2	5.1	11.4	10.6	13.8	13.5	13.5	12.9	16.7	13.5
5	7.6	6.7	6.5	5.0	11.6	10.9	13.5	13.1	13.4	12.7	16.7	14.3
6	7.4	6.5	5.8	4.9	11.9	11.3	13.1	12.8	13.9	12.9	16.2	13.4
7	7.8	6.5	5.3	4.8	12.6	11.7	13.3	12.4	13.9	12.9	16.1	12.3
8	7.4	5.8	5.2	4.5	12.6	12.3	13.1	12.4	13.9	13.0	15.9	12.5
9	6.5	5.6	5.4	4.4	12.7	12.3	14.4	13.1	13.8	12.7	16.6	12.6
10	8.1	6.0	6.4	5.0	12.7	12.4	14.2	13.6	13.9	12.6	14.3	12.1
11	7.6	7.1	7.8	6.3	12.4	12.3	14.0	13.7	14.0	12.8	13.7	11.3
12	8.3	7.2	9.0	7.7	12.3	11.6	13.9	13.4	14.0	12.8	12.1	10.1
13	8.8	7.7	9.7	8.5	11.9	11.6	13.4	12.9	13.8	12.5	12.1	11.2
14	8.7	7.7	9.6	8.6	11.9	11.3	13.3	12.8	14.3	12.5	12.5	11.2
15	8.5	7.5	9.1	7.7	12.4	11.2	13.5	13.1	14.4	12.9	---	---
16	8.6	7.1	8.0	7.0	12.3	11.7	13.5	13.4	14.4	12.8	12.2	10.9
17	9.3	7.6	7.2	6.3	11.7	11.2	13.5	13.3	14.6	12.7	12.2	11.1
18	9.1	7.3	8.9	7.0	11.2	10.7	13.4	12.8	14.7	12.8	12.3	11.6
19	8.6	6.7	9.8	8.5	11.0	10.7	13.4	13.1	14.9	13.0	11.8	11.4
20	9.7	7.0	9.6	8.3	11.3	10.9	13.4	13.2	15.0	13.5	12.9	11.3
21	10.2	7.3	9.4	7.0	12.0	11.3	13.6	13.1	15.0	13.2	12.3	11.8
22	10.8	7.2	9.8	8.6	12.4	11.8	13.7	13.1	15.0	14.1	12.8	12.2
23	10.1	6.8	10.5	8.9	12.4	12.0	13.7	13.3	15.0	14.1	12.1	11.6
24	10.9	7.0	10.6	9.5	12.1	11.5	13.7	13.1	15.0	13.9	12.5	11.8
25	8.0	6.4	10.6	9.9	11.8	10.4	13.1	12.5	15.0	13.6	12.7	12.4
26	6.3	4.7	11.7	10.0	12.8	12.0	13.3	13.0	15.0	13.8	12.4	12.1
27	7.2	4.4	12.2	11.3	13.2	12.6	13.1	12.6	15.0	14.4	12.3	12.2
28	7.6	5.8	12.5	11.5	13.1	12.7	13.1	12.9	15.0	13.9	12.2	11.6
29	8.6	6.3	12.7	11.3	13.9	13.6	13.3	12.9	---	---	11.5	11.0
30	9.1	6.7	11.3	9.9	13.9	13.6	13.3	12.9	---	---	11.4	10.9
31	8.5	6.6	---	---	13.6	13.3	13.2	12.7	---	---	11.1	10.5
MONTH	10.9	3.0	12.7	4.4	13.9	9.6	14.4	12.4	15.0	12.5	16.7	10.1

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.4	10.0	12.4	9.4	7.7	6.4	8.8	5.5	8.0	6.5	7.7	7.2
2	10.8	9.8	12.6	9.8	6.8	6.2	6.5	5.2	7.7	6.1	7.4	6.9
3	11.0	10.7	12.7	9.8	7.5	5.9	6.8	5.6	7.2	4.3	7.2	6.7
4	10.7	10.1	10.4	9.3	7.3	6.6	7.4	6.8	7.4	5.7	7.0	6.4
5	10.7	9.7	10.6	8.7	7.5	6.7	7.5	6.8	7.2	6.3	6.9	5.9
6	10.3	9.8	13.3	9.6	7.3	6.5	7.5	6.6	6.9	6.0	6.0	5.4
7	10.8	9.8	11.3	9.8	6.9	5.7	7.5	6.3	6.9	6.2	6.3	5.0
8	11.0	9.8	10.3	9.1	6.8	4.3	7.6	5.9	7.6	6.3	6.3	5.0
9	11.6	10.1	10.1	8.4	7.2	3.1	8.0	5.9	7.7	6.4	6.4	4.9
10	11.4	10.1	11.9	8.8	---	---	7.6	5.8	7.2	4.8	6.5	4.9
11	10.1	8.9	12.4	9.0	---	---	8.0	5.7	6.8	5.5	6.5	4.8
12	11.8	9.6	9.5	7.9	---	---	9.1	6.2	6.6	4.1	6.1	5.0
13	12.4	9.7	8.5	5.8	---	---	8.5	6.3	6.5	5.3	6.3	4.9
14	12.7	9.8	9.4	8.2	7.9	7.7	9.3	5.9	7.0	6.1	5.8	4.9
15	13.7	9.9	10.0	9.3	7.6	7.3	9.3	5.8	6.3	5.4	6.4	4.9
16	13.9	10.1	9.9	9.2	7.6	7.1	9.8	6.0	6.4	5.5	6.1	4.9
17	15.0	10.5	10.3	9.3	7.3	6.8	10.3	6.2	6.8	5.4	5.9	4.8
18	11.7	8.1	9.8	8.7	7.2	6.5	10.8	6.4	7.0	5.4	6.2	5.4
19	10.1	8.7	9.3	8.1	6.6	4.9	11.2	6.3	6.9	5.4	6.0	5.2
20	10.6	9.7	8.8	7.7	7.1	6.3	11.7	6.3	6.5	5.0	6.1	4.8
21	11.4	10.7	8.4	5.9	6.6	5.2	10.4	6.1	7.5	6.1	6.0	4.9
22	12.7	11.2	9.3	8.3	7.5	5.7	11.9	5.6	7.7	6.4	6.5	5.1
23	11.4	10.2	8.9	6.9	7.9	6.6	10.8	5.6	7.6	5.9	7.1	5.6
24	12.2	10.1	8.0	7.2	8.0	6.5	6.8	5.3	7.4	5.6	7.6	5.9
25	10.7	9.5	8.7	7.8	7.7	6.1	7.3	5.2	7.1	5.3	7.6	5.8
26	11.2	10.2	8.5	7.4	6.9	5.3	8.6	5.9	7.0	5.1	8.1	6.4
27	11.5	10.2	8.3	7.2	7.6	5.5	8.5	5.6	7.1	5.4	8.5	6.7
28	11.8	9.8	8.1	7.0	7.7	5.5	8.6	5.9	6.2	5.0	8.5	6.6
29	11.7	9.5	8.3	6.9	8.6	5.4	8.4	5.9	6.8	4.7	8.8	6.7
30	12.2	9.2	7.6	6.7	9.0	5.5	6.9	5.7	7.0	5.1	8.3	6.7
31	---	---	8.1	6.5	---	---	7.6	5.1	7.4	6.0	---	---
MONTH	15.0	8.1	13.3	5.8	9.0	3.1	11.9	5.1	8.0	4.1	8.8	4.8
YEAR	16.7	3.0										

LITTLE MIAMI RIVER BASIN

03242150 CAESAR CREEK NEAR XENIA, OH

LOCATION.--Lat 39°37'25", long 83°54'09", Greene County, Hydrologic Unit 05090202, on left bank at downstream side of bridge on Winchester Road, 0.2 mi (0.3 km) downstream from unnamed left bank tributary, 4.5 mi (7.2 km) south of Xenia, 7.4 mi (11.9 km) upstream from Anderson Fork, and at mile 22.1 (35.6 km).

DRAINAGE AREA.--71.4 mi² (185 km²).

PERIOD OF RECORD.--August 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 894.18 ft (272.546 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period, which are fair. Since 1964, some regulation by seasonal changes in storage in Lake Shawnee, 7.2 mi (11.6 km) upstream, drainage area 10.9 mi² (28.2 km²). Summer storage is about 1,100 acre-ft (1.36 hm³) more than winter. Water-quality data collected at this site 1968 to 1977.

AVERAGE DISCHARGE.--10 years, 75.4 ft³/s (2.135 m³/s) 14.34 in/yr (364 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,170 ft³/s (146 m³/s) July 4, 1975, gage height, 13.47 ft (4.106 m) from rating curve extended above 1,240 ft³/s (35.1 m³/s) on the basis of rating extension study; minimum daily, 0.42 ft³/s (0.012 m³/s) July 20, 21, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 24, 1968, reached a stage of 15.9 ft (4.846 m) outside, from flood mark; discharge, 12,500 ft³/s (354 m³/s) result of contracted opening estimate.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2890 ft³/s (81.8 m³/s) Mar. 14 gageheight, 11.19 ft (3.411 m); (base 1,000 ft³/s, 28.3 m³/s): minimum daily discharge, 1.2 ft³/s (0.034 m³/s) Sept. 27-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	9.1	541	11	90	20	77	65	24	7.8	8.9	101
2	21	8.6	266	8.4	80	19	60	45	21	41	6.4	51
3	11	8.6	215	6.6	70	18	48	40	20	201	6.4	31
4	7.1	8.6	182	5.3	62	17	47	43	16	63	6.0	21
5	5.6	8.6	584	4.9	54	17	44	46	16	43	4.5	17
6	4.9	8.6	408	4.9	49	17	43	38	14	24	4.0	13
7	4.7	8.6	231	43	44	17	46	33	18	18	62	11
8	5.2	8.6	223	403	42	17	43	43	62	14	24	8.3
9	14	8.6	175	277	38	18	39	85	126	13	14	6.9
10	17	8.6	181	150	36	20	39	62	62	13	30	6.0
11	13	8.5	159	110	34	25	43	37	43	12	26	5.6
12	11	7.9	121	88	32	96	47	36	33	11	16	5.0
13	7.9	8.7	270	68	31	339	46	315	35	9.9	13	4.5
14	6.7	8.2	910	58	30	1880	40	356	24	12	9.9	4.5
15	6.1	58	352	50	29	1440	38	294	20	12	8.3	4.0
16	5.7	143	254	44	28	856	36	191	19	11	6.9	4.5
17	5.7	169	186	41	27	565	31	163	15	8.9	6.0	4.5
18	5.7	133	141	39	26	379	132	120	14	7.4	5.0	4.5
19	5.7	107	113	37	25	430	294	86	16	6.9	4.0	4.0
20	5.7	87	103	36	25	439	348	75	14	6.0	4.5	3.6
21	5.7	113	84	35	24	578	247	73	17	5.6	4.5	3.2
22	5.7	110	62	36	24	412	170	62	14	5.0	4.0	2.5
23	5.7	87	49	39	24	310	137	70	9.9	4.5	3.2	2.1
24	5.7	71	44	52	23	269	137	89	8.9	7.8	2.8	1.9
25	5.9	59	40	120	23	291	244	67	7.8	11	2.5	[illegible]
26	9.5	49	34	325	22	603	240	39	7.8	7.8	2.1	1.4
27	12	40	29	250	21	348	133	34	7.8	6.0	2.1	1.2
28	12	37	25	210	20	244	109	31	9.4	5.0	16	1.2
29	11	31	20	175	---	170	99	27	8.3	4.0	14	1.2
30	10	149	15	135	---	101	85	25	6.9	11	61	1.2
31	9.3	---	13	108	---	88	---	27	---	13	210	---
TOTAL	268.2	1558.8	6030	2970.1	1033	10043	3142	2717	709.8	615.6	588.0	328.4
MEAN	8.65	52.0	195	95.8	36.9	324	105	87.6	23.7	19.9	19.0	10.9
MAX	21	169	910	403	90	1880	348	356	126	201	210	101
MIN	4.7	6.2	13	4.9	20	17	31	25	6.9	4.0	2.1	1.2
CFSM	.12	.73	2.73	1.34	.52	4.54	1.47	1.23	.33	.28	.27	.15
IN.	.14	.81	3.14	1.55	.54	5.23	1.64	1.42	.37	.32	.31	.17

CAL YR 1977 TOTAL 14490.61 MEAN 39.7 MAX 910 MIN .42 CFSM .56 IN 7.55
WTR YR 1978 TOTAL 30003.90 MEAN 82.2 MAX 1880 MIN 1.2 CFSM 1.15 IN 15.63

03242200 ANDERSON FORK NEAR NEW BURLINGTON, OH

LOCATION.--Lat 39°33'59", long 83°54'10", Greene County, Hydrologic Unit 05090202, on right bank at downstream side of bridge on Old Winchester Trail, 1.0 mi (1.6 km) downstream from Painters Run, 3.4 mi (5.5 km) east of New Burlington, 5.0 mi (8.0 km) upstream from mouth, and at mile 19.7 (31.7 km).

DRAINAGE AREA.--77.8 mi² (202 km²).

PERIOD OF RECORD.--July 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 883.67 ft (269.343 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Water-quality data collected at this site 1968 to 1977.

AVERAGE DISCHARGE.--10 years, 81.1 ft³/s (2.297 m³/s), 14.16 in/yr (360 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,510 ft³/s (156 m³/s) Feb. 24, 1975, gage height, 12.76 ft (3.889 m); minimum, 0.08 ft³/s (0.002 m³/s) Sept. 24, 25, 1970.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 24, 1969 reached a stage of 15.7 ft (4.785 m), present datum, from floodmarks, discharge about 9,400 ft³/s (266 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 14	0800	2100	59.5	9.43	2.874	Mar. 14	2400	*4280	121	*11.81	3.600

Minimum, 2.3 ft³/s (0.065 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	127	13	696	31	82	21	100	50	22	17	7.4	118
2	187	12	346	28	72	20	82	41	21	46	5.9	49
3	105	11	263	25	62	19	64	37	20	261	6.4	27
4	59	11	223	23	56	19	41	39	18	105	5.4	18
5	37	9.9	615	22	50	18	48	41	17	60	4.8	12
6	28	9.9	652	37	47	19	45	32	16	39	4.8	9.8
7	25	9.7	384	63	44	19	47	28	20	28	20	8.0
8	31	9.7	173	569	42	19	41	37	44	22	10	7.0
9	69	9.7	166	348	39	21	38	90	98	19	6.7	6.3
10	51	9.7	141	173	37	32	39	77	53	16	78	5.8
11	35	9.7	110	120	35	44	43	54	34	14	131	5.5
12	27	9.5	93	88	34	161	39	48	28	12	45	5.3
13	21	8.6	134	72	33	531	33	315	26	11	25	5.1
14	17	8.0	1470	62	32	2670	28	351	21	13	16	5.0
15	15	7.4	825	52	31	3080	24	270	18	13	11	5.0
16	14	8.6	340	48	30	1450	25	183	18	11	9.1	25
17	13	41	236	45	29	635	24	158	16	8.8	7.1	44
18	11	57	186	42	28	354	78	118	15	7.7	6.5	19
19	11	33	146	40	28	374	135	90	91	6.7	5.9	11
20	11	25	134	39	27	434	153	75	43	6.2	5.9	8.1
21	9.3	93	114	39	27	558	120	65	33	5.7	5.2	7.8
22	8.5	126	89	40	26	417	88	54	25	5.2	4.8	7.4
23	8.1	91	76	44	26	380	76	50	19	5.1	4.6	6.7
24	7.7	67	71	64	26	340	85	54	16	7.9	4.3	6.5
25	7.5	53	76	107	25	320	146	45	14	10	4.2	6.5
26	16	41	62	480	23	430	195	38	14	7.9	4.1	6.4
27	32	45	60	230	23	330	116	34	14	6.8	4.1	6.0
28	26	32	52	170	22	260	86	31	21	5.3	5.1	5.9
29	21	24	44	140	---	200	70	30	17	5.0	6.5	5.8
30	17	197	50	115	---	160	61	28	13	15	46	7.0
31	15	---	35	95	---	130	---	26	---	12	204	---
TOTAL	1062.1	1082.4	8062	3451	1036	13465	2170	2589	825	802.3	704.8	459.9
MEAN	34.3	36.1	260	111	37.0	434	72.3	83.5	27.5	25.9	22.7	15.3
MAX	187	197	1470	569	82	3080	195	351	98	261	204	118
MIN	7.5	7.4	35	22	22	18	24	26	13	5.0	4.1	5.0
CFSM	.44	.46	3.34	1.43	.48	5.58	.93	1.07	.35	.33	.29	.20
IN.	.51	.52	3.85	1.65	.50	6.44	1.04	1.24	.39	.38	.34	.22

CAL YR 1977 TOTAL 18780.50 MEAN 51.5 MAX 1470 MIN .45 CFSM .66 IN 8.98
WTR YR 1978 TOTAL 35709.50 MEAN 97.8 MAX 3080 MIN 4.1 CFSM 1.26 IN 17.07

03245500 LITTLE MIAMI RIVER AT MILFORD, OH

NATIONAL STREAM-QUALITY ACCOUNTING NETWORK STATION

LOCATION.--Lat 39°10'17", long 84°17'53", Clermont County, Hydrologic Unit 05090202, on right bank 500 ft (152 m) downstream from Wooster Pike Bridge on U.S. Highway 50 in Milford, 1.2 mi (1.9 km) upstream from East Fork, 6.4 mi (10.3 km) downstream from North Branch Creek, and at mile 12.9 (20.8 km).

DRAINAGE AREA.--1,203 mi² (3,116 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1915 to September 1917, October 1917 to May 1920 (gage heights only), March 1925 to September 1936, October 1938 to current year. Monthly discharge only for some periods, published in WSP 1305, published as "at Miamiville" 1915-20.

REVISED RECORDS.--WSP 728: 1931. WSP 743: 1932. WSP 873: 1925-36. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 494.35 ft (150.678 m) National Geodetic Vertical Datum, adjustment of 1912. June 22, 1915, to May 14, 1920, nonrecording gage at site 4 mi (6 km) upstream at different datum. Mar. 11, 1925, to Aug. 16, 1928, nonrecording gage at bridge 500 ft (152 m) upstream at datum 5.72 ft (1.743 m) higher. Aug. 17, 1928 to Sept. 30, 1977 water-stage recorder at same site at datum 5.00 ft (1.524 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Some regulation since 1948 by Cowan Lake, capacity 12,000 acre-ft (14.8 hm³), 45 mi (72 km) upstream on Cowan Creek, tributary to Todd Fork, and Caesar Creek Lake capacity 242,200 acre-ft (298.6 hm³) 41.3 mi (66.4 km) upstream on Caesar Creek.

AVERAGE DISCHARGE.--53 years, (1915-17, 1925-36, 1938-78), 1,220 ft³/s (34.55 m³/s), 13.77 in/yr (350 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 84,100 ft³/s (2,380 m³/s) Jan. 22, 1959, gage height, 27.30 ft (8.321 m) present datum, from rating curve extended above 60,000 ft³/s (1,700 m³/s) on basis of slope-area measurement of peak flow; minimum observed, 27 ft³/s (0.76 m³/s) Sept. 18, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 30.5 ft (9.30 m), present datum, from information by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 15,000 ft³/s and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 14	1300	17800	504	14.27	4.349	Mar. 14	1200	*27400	776	*17.09	5.209

Minimum daily discharge, 153 ft³/s (4.33 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4160	252	9850	450	1100	413	1240	950	607	342	389	2900
2	2250	233	4500	420	1030	429	1100	840	531	985	299	1480
3	992	225	2670	380	1000	429	992	759	487	4510	308	1020
4	595	218	2360	350	940	434	935	840	465	1400	537	772
5	418	211	7810	400	900	413	908	957	439	752	389	583
6	337	222	6470	450	860	408	880	853	418	514	275	460
7	299	236	3290	681	840	465	992	739	471	413	860	360
8	379	252	1890	8140	790	471	943	1250	833	351	713	312
9	531	275	2240	5010	740	509	847	3160	1750	308	403	287
10	548	267	1560	2730	675	759	793	1640	1220	279	492	263
11	429	248	1060	1500	637	1460	806	1070	943	255	2790	233
12	355	248	1060	1250	583	4680	887	943	746	240	2070	215
13	308	222	1580	1100	577	7300	772	6250	675	271	1020	207
14	271	207	13300	960	577	22300	681	6060	619	252	554	200
15	248	197	8950	875	554	13800	637	4700	525	236	384	200
16	229	222	5840	800	531	9670	601	2770	487	229	316	197
17	211	1030	4070	740	509	6530	571	2170	429	207	271	1090
18	197	999	3130	680	525	4600	1460	1680	369	190	263	950
19	190	668	2560	640	509	4280	3620	1340	565	178	252	554
20	187	637	2180	590	509	4230	3020	1120	687	175	333	312
21	184	2700	1970	550	498	4360	2460	1120	681	187	312	267
22	178	1930	1670	525	487	4680	1640	1030	589	434	236	225
23	171	1180	1240	500	460	3920	1390	1090	439	218	211	204
24	165	901	992	490	429	3120	1820	1690	351	613	194	194
25	190	700	1030	1160	408	3680	2110	1330	320	936	187	181
26	1040	583	985	5360	413	7010	3540	1080	1480	444	215	168
27	687	509	759	3220	408	4750	2170	936	915	287	601	162
28	460	471	637	2600	408	3120	1500	847	481	244	880	159
29	369	449	600	1970	---	2150	1220	746	418	215	1430	156
30	316	2900	540	1400	---	1630	1080	675	333	329	2650	153
31	279	---	500	1200	---	1380	---	643	---	643	7010	---
TOTAL	17173	19392	97293	47121	17897	123380	41616	51278	19273	16637	26844	14464
MEAN	554	646	3138	1520	639	3980	1387	1654	642	537	866	482
MAX	4160	2900	13300	8140	1100	22300	3620	6250	1750	4510	7010	2900
MIN	165	197	500	350	408	408	571	643	320	175	187	153
CFSM	.46	.54	2.61	1.26	.53	3.31	1.15	1.38	.53	.45	.72	.40
IN.	.53	.60	3.01	1.46	.55	3.82	1.29	1.59	.60	.51	.83	.45

CAL YR 1977 TOTAL 290753 MEAN 797 MAX 13300 MIN 88 CFSM .66 IN 8.99
WTR YR 1978 TOTAL 492368 MEAN 1349 MAX 22300 MIN 153 CFSM 1.12 IN 15.23

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1965 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1975 to current year.
pH: May 1975 to current year.
WATER TEMPERATURES: May 1975 to current year.
DISSOLVED OXYGEN: May 1975 to current year.

INSTRUMENTATION.--Water-quality monitor since May 1975. Prior to May 1975, sampling site was 4.2 mi (6.76 km) upstream.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. Dissolved oxygen concentrations listed as 15.0 mg/L represent concentrations of 15.0 mg/L or higher due to instrument limitations prior to March 29, 1978; 20.0 mg/L limitation thereafter.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,200 micromhos Feb. 12, 1977; minimum, 197 micromhos July 4, 1975.
pH: Maximum, 9.3 units June 10, 1977; minimum, 7.1 units June 27, 1978.
WATER TEMPERATURES: Maximum, 33.0°C July 8, 18, 20, 1977; minimum, 0.0°C on many days during winter periods.
DISSOLVED OXYGEN: Maximum, 20.0 mg/L or higher July 18, 19, 1978; minimum 3.8 mg/L July 21, 1977.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,090 micromhos Mar. 9; minimum, 216 Mar. 14.
pH: Maximum, 9.0 units Sept. 28-30; minimum, 7.1 units June 27.
WATER TEMPERATURES: Maximum, 31.0°C June 30; minimum, 0.0°C on many days during winter period.
DISSOLVED OXYGEN: Maximum, 20.0 mg/L July 18, 19; minimum, 4.6 mg/L July 3.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT												
18...	1200	840	8.3	11.0	7	--	9.5	86	--	--	67	34
NOV												
16...	1215	875	7.9	9.0	10	--	10.7	92	--	--	7900	2200
DEC												
12...	1600	816	8.1	.5	7	--	13.6	94	--	--	6300	1650
JAN												
04...	1000	790	8.3	1.0	3	--	13.1	92	--	--	3000	600
FEB												
15...	1430	830	8.0	.5	3	--	14.0	97	--	--	770	150
MAR												
07...	1530	903	8.4	.5	5	--	15.2	110	--	--	3300	2200
APR												
10...	1400	730	8.5	16.0	7	--	12.7	130	15	--	420	680
MAY												
08...	1530	672	8.2	12.5	65	--	10.5	98	20	--	1600	15000
JUN												
12...	1500	630	7.9	24.0	25	--	7.6	89	25	--	1600	610
JUL												
05...	1515	531	7.9	23.5	--	65	7.8	90	24	--	1800	420
AUG												
01...	1415	684	8.0	24.5	--	36	8.3	99	--	29	1300	260
SEP												
06...	1500	650	8.0	24.5	--	15	8.4	100	--	4	444	54

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WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT												
18...	350	83	89	32	35	4.0	330	0	270	2.6	63	65
NOV												
16...	350	85	88	31	41	4.1	320	0	260	6.4	66	72
DEC												
12...	350	110	90	31	32	2.9	290	0	240	3.7	63	66
JAN												
04...	370	100	95	33	24	2.7	330	0	270	2.6	61	53
FEB												
15...	360	91	92	32	34	2.4	330	0	270	5.3	73	65
MAR												
07...	330	87	84	28	50	2.6	290	0	240	1.8	68	93
APR												
10...	300	52	75	27	21	2.5	300	0	250	1.5	59	44
MAY												
08...	300	74	77	25	20	2.2	270	0	220	2.7	63	43
JUN												
12...	290	93	75	25	17	3.2	240	0	200	4.8	50	36
JUL												
05...	230	58	60	19	15	3.0	--	--	170	--	40	33
AUG												
01...	280	71	73	24	36	3.8	--	--	210	--	79	58
SEP												
06...	280	63	72	25	19	2.8	--	--	220	--	48	38

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M
OCT												
18...	.2	8.8	511	460	--	--	--	--	.65	7.7	--	--
NOV												
16...	.2	5.5	492	466	--	--	--	--	.80	--	1500	--
DEC												
12...	.2	11	466	439	--	--	--	--	.22	9.0	--	--
JAN												
04...	.2	8.3	475	440	--	--	--	--	.35	--	--	--
FEB												
15...	.1	4.7	500	466	.29	.81	4.7	21	.35	2.6	--	--
MAR												
07...	.2	3.9	510	473	.69	.93	3.6	16	.40	7.3	240	--
APR												
10...	.1	3.7	430	380	.42	.45	3.4	15	.19	--	--	630
MAY												
08...	.2	2.1	393	366	.82	.90	3.2	14	.38	8.7	2000	--
JUN												
12...	.2	6.8	372	332	.89	.96	8.2	36	.37	7.8	2100	.551
JUL												
05...	.2	7.1	341	280	.86	.94	5.0	22	.35	--	1200	--
AUG												
01...	.4	6.3	403	407	.76	.81	2.7	12	.52	4.8	7800	7.32
SEP												
06...	.2	6.8	398	344	.83	.86	3.3	14	.32	6.1	--	--

ANALYSES OF MINOR ELEMENTS

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
NOV												
16...	1215	1	1	2	2	<10	7	3	3	9	8	720
JAN												
04...	1000	1	1	0	0	<10	0	0	0	12	6	190
APR												
10...	1400	1	1	1	0	<10	0	0	0	10	5	490
JUL												
05...	1515	1	1	7	6	10	0	0	0	10	4	3900

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV											
16...	30	28	1	40	20	<.5	<.5	0	0	50	40
JAN											
04...	10	3	1	50	40	<.5	<.5	0	0	20	20
APR											
10...	10	29	13	40	20	<.5	<.5	0	0	40	30
JUL											
05...	10	110	110	130	10	.5	.5	0	0	40	0

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT					
18...	1200	190	11.0	34	17
NOV					
16...	1215	194	9.0	33	17
DEC					
12...	1900	1130	.5	20	61
JAN					
09...	1000	350	1.0	7	6.6
FEB					
13...	1430	571	.5	2	3.1
MAR					
07...	1330	47	.5	7	.89
APR					
19...	1400	740	10.0	12	25
MAY					
08...	1330	1140	17.5	143	440
JUN					
12...	1300	557	24.0	70	141
JUL					
03...	1315	713	23.5	134	258
AUG					
01...	1415	374	24.5	108	108
SEP					
06...	1300	455	24.5	36	44

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SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	827	282	825	791	450	369	840	806	696	662	888	860
2	434	350	792	774	563	452	812	794	717	666	891	857
3	563	396	819	780	627	569	816	792	649	647	876	849
4	594	564	866	819	648	630	---	---	696	653	885	867
5	609	563	884	849	651	350	825	803	705	684	888	858
6	657	599	893	855	494	362	905	807	719	704	897	857
7	696	654	888	863	585	500	914	723	731	717	909	879
8	719	665	890	864	669	590	711	329	732	720	944	872
9	738	665	902	879	759	680	452	327	744	720	1090	945
10	801	746	908	890	735	705	558	491	765	734	1040	906
11	804	773	900	869	807	740	590	560	798	767	902	696
12	803	779	882	860	839	810	635	591	808	782	683	470
13	809	767	875	855	900	734	695	642	815	791	464	359
14	807	770	891	876	681	339	705	684	821	800	347	216
15	825	800	891	869	443	360	717	701	851	813	309	221
16	836	807	884	842	497	443	740	714	834	809	338	303
17	866	834	846	606	602	503	744	726	836	815	437	341
18	896	840	741	687	632	606	746	729	851	818	555	438
19	914	896	699	677	659	630	749	726	873	845	579	558
20	926	903	698	644	671	657	749	734	857	828	575	531
21	930	909	635	468	678	663	774	737	846	825	560	525
22	927	914	540	468	689	674	810	771	848	827	530	498
23	938	920	636	548	702	683	824	795	848	822	539	504
24	948	924	671	617	755	701	831	804	843	822	567	539
25	942	872	728	672	788	600	908	789	834	816	567	513
26	876	549	767	731	788	774	764	480	834	813	507	431
27	719	651	788	761	816	774	549	477	858	824	503	450
28	768	695	810	777	821	803	545	524	881	851	575	500
29	788	765	851	810	848	818	590	542	---	---	629	579
30	812	779	956	408	863	843	620	587	---	---	683	629
31	819	803	---	---	858	828	663	618	---	---	711	681
MONTH	948	282	956	408	900	339	914	327	881	647	1090	216

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	728	704	716	696	707	687	726	660	726	677	498	392
2	743	725	719	699	717	699	674	554	693	639	534	503
3	750	737	720	701	723	704	615	287	737	669	585	537
4	755	741	719	696	753	716	504	326	701	665	626	585
5	755	743	705	695	764	752	575	512	713	672	659	621
6	770	743	716	693	770	752	614	581	722	684	675	647
7	753	732	738	711	768	729	678	612	749	576	705	665
8	749	737	729	534	738	648	716	675	542	371	729	695
9	747	734	566	444	593	485	737	713	521	399	771	726
10	750	719	579	482	650	543	767	735	701	527	779	746
11	735	716	629	585	606	533	780	750	698	299	815	758
12	731	713	666	632	644	618	786	737	477	411	827	807
13	731	716	653	333	687	639	783	749	---	---	836	798
14	714	701	444	369	716	687	765	735	---	---	854	810
15	731	702	515	444	742	711	783	741	---	---	867	840
16	738	717	594	519	742	712	777	737	---	---	891	852
17	750	725	626	597	742	712	777	720	---	---	882	537
18	744	410	647	626	744	718	765	638	---	---	549	500
19	486	356	672	648	723	654	713	450	---	---	570	503
20	518	470	687	675	774	642	672	587	---	---	569	537
21	570	500	704	684	658	586	837	675	---	---	623	566
22	633	570	696	665	680	648	863	699	---	---	675	605
23	684	630	690	615	669	630	932	683	---	---	768	687
24	666	624	623	570	740	674	746	453	792	758	794	753
25	651	566	630	591	750	736	855	612	819	779	825	788
26	575	513	630	620	736	432	758	552	822	659	846	810
27	614	579	656	624	423	366	756	645	717	581	857	836
28	651	618	663	653	482	381	702	665	587	456	860	833
29	689	653	678	659	668	492	710	639	506	399	894	845
30	702	686	684	665	725	662	671	518	537	371	879	848
31	---	---	695	674	---	---	762	512	386	330	---	---
MONTH	770	356	738	333	774	366	932	287	822	299	894	392
YEAR	1090	216										

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PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.5	7.4	8.4	8.1	7.7	7.6	8.0	7.9	8.2	7.8	8.3	8.1
2	7.5	7.4	8.1	8.0	7.8	7.6	8.0	8.0	8.1	7.8	8.3	8.2
3	7.8	7.5	8.1	8.0	7.9	7.8	8.0	7.9	8.2	7.9	8.3	8.2
4	7.9	7.8	8.1	8.0	8.0	7.9	---	---	8.2	7.9	8.4	8.2
5	7.9	7.8	8.1	8.0	8.0	7.7	---	---	8.1	7.9	8.4	8.2
6	8.0	7.9	8.1	8.0	7.8	7.7	---	---	8.2	8.0	8.4	8.3
7	8.1	7.9	8.1	8.0	8.0	7.8	---	---	8.2	7.8	8.4	8.0
8	8.1	8.0	8.1	8.0	8.1	8.0	---	---	8.2	7.9	8.3	8.0
9	8.2	8.1	8.0	8.0	8.1	8.1	---	---	8.2	8.0	8.4	8.2
10	8.3	8.2	8.1	8.0	8.1	8.1	---	---	8.2	8.0	8.4	8.3
11	8.2	8.1	8.3	8.1	8.1	8.0	---	---	8.2	8.0	8.3	8.1
12	8.2	8.1	8.3	8.2	8.1	8.0	---	---	8.2	8.0	8.1	7.9
13	8.2	8.1	8.4	8.3	8.1	7.9	---	---	8.1	8.0	7.9	7.8
14	8.2	8.1	8.4	8.3	7.9	7.5	---	---	8.2	8.0	7.8	7.7
15	8.2	8.1	8.4	8.3	7.7	7.6	---	---	8.3	8.0	---	---
16	8.2	8.2	8.3	7.8	7.7	7.4	---	---	8.1	8.0	---	---
17	8.3	8.2	8.1	7.9	7.8	7.6	---	---	8.2	8.0	---	---
18	8.5	8.3	8.0	7.9	7.8	7.8	---	---	8.2	8.1	---	---
19	8.6	8.5	8.0	8.0	7.8	7.7	---	---	8.3	8.2	---	---
20	8.5	8.5	8.0	7.9	7.9	7.8	---	---	8.3	8.1	---	---
21	8.5	8.4	7.9	7.7	7.9	7.9	---	---	8.3	8.1	---	---
22	8.5	8.4	7.8	7.8	8.0	7.9	---	---	8.3	8.2	7.8	7.7
23	8.5	8.5	7.9	7.8	8.0	7.9	---	---	8.3	8.2	7.8	7.8
24	8.5	8.4	8.0	7.9	8.0	7.8	---	---	8.4	8.2	8.0	7.8
25	8.4	8.4	8.0	8.0	8.0	7.9	---	---	8.4	8.2	8.0	7.9
26	8.4	8.1	8.2	8.0	8.1	8.0	---	---	8.4	8.2	7.9	7.9
27	8.1	8.0	8.2	8.1	8.1	8.0	---	---	8.4	8.2	8.0	7.9
28	8.2	8.1	8.2	8.2	8.0	8.0	---	---	8.3	8.1	8.1	7.9
29	8.3	8.2	8.2	8.2	8.1	7.9	---	---	---	---	8.1	8.0
30	8.3	8.2	8.2	7.7	8.0	7.9	---	---	---	---	8.2	8.1
31	8.4	8.2	---	---	8.0	7.9	8.2	8.1	---	---	8.2	7.9
MONTH	8.6	7.4	8.4	7.7	8.1	7.4	8.2	7.9	8.4	7.8	8.4	7.7

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.2	8.1	8.5	8.3	8.1	7.9	8.6	8.1	8.1	8.0	8.0	7.8
2	8.4	8.2	8.5	8.4	8.1	8.1	8.3	8.0	8.1	8.0	8.1	7.8
3	8.4	8.3	8.6	8.4	8.2	8.1	8.0	7.4	8.1	8.0	8.1	7.8
4	8.4	8.4	8.6	8.4	8.2	8.1	7.8	7.6	8.1	8.0	8.2	8.0
5	8.5	8.4	8.4	8.3	8.2	8.1	8.0	7.8	8.2	8.1	8.2	8.0
6	8.5	8.4	8.5	8.2	8.3	8.1	8.0	7.9	8.1	8.0	8.2	8.0
7	8.5	8.4	8.5	8.4	8.2	8.0	8.2	8.0	8.0	7.7	8.2	7.8
8	8.6	8.4	8.5	8.0	8.1	7.9	8.3	8.1	7.9	7.5	8.2	8.0
9	8.7	8.5	8.1	7.8	7.9	7.8	8.4	8.2	7.8	7.5	8.3	8.1
10	8.6	8.5	8.1	7.9	7.9	7.7	8.6	8.4	8.0	7.8	8.4	8.2
11	8.7	8.5	8.3	8.1	7.8	7.6	8.7	8.5	8.0	7.6	8.4	8.3
12	8.8	8.5	8.4	8.2	7.9	7.7	8.8	8.6	7.9	7.6	8.4	8.3
13	8.7	8.6	8.4	7.7	8.0	7.9	8.7	8.5	7.9	7.7	8.4	8.2
14	8.7	8.4	8.0	7.8	8.1	8.0	8.6	8.4	7.9	7.7	8.4	8.3
15	8.7	8.3	8.0	8.0	8.1	8.0	8.6	8.4	7.9	7.6	8.5	8.2
16	8.7	8.4	8.1	8.0	8.1	8.0	8.7	8.4	8.0	7.8	8.5	8.4
17	8.7	8.5	8.1	8.1	8.0	8.0	8.7	8.4	8.1	7.9	8.5	7.7
18	8.5	7.9	8.1	8.0	8.2	8.0	8.8	8.3	8.2	8.1	7.9	7.2
19	8.0	7.8	8.1	8.0	8.1	8.0	8.6	8.3	8.4	8.0	7.9	7.3
20	8.1	7.9	8.1	8.1	8.0	7.9	8.7	8.2	8.5	8.3	8.3	7.7
21	8.1	8.0	8.2	8.1	7.9	7.8	8.7	8.4	8.5	8.1	8.5	8.1
22	8.2	8.1	8.2	8.1	8.0	7.9	8.5	8.1	8.5	8.1	8.7	8.5
23	8.3	8.2	8.1	8.0	8.0	7.9	8.7	8.4	8.6	8.4	8.8	8.6
24	8.2	8.1	8.0	7.9	8.1	7.9	8.5	7.6	8.6	8.4	8.8	8.7
25	8.2	8.1	8.0	7.9	8.2	8.1	8.1	7.8	8.7	8.5	8.9	8.7
26	8.1	8.0	8.0	7.8	8.1	7.4	7.9	7.6	8.7	8.5	8.9	8.7
27	8.1	8.1	8.1	7.9	7.5	7.1	8.0	7.9	8.5	7.9	8.9	8.7
28	8.2	8.1	8.1	7.9	7.6	7.3	8.3	7.9	8.0	7.4	9.0	8.9
29	8.3	8.2	8.1	7.9	7.9	7.5	8.5	8.1	7.9	7.5	9.0	8.9
30	8.4	8.2	8.1	8.0	8.2	7.9	8.5	8.1	8.0	7.8	9.0	8.9
31	---	---	8.1	7.9	---	---	8.3	8.0	7.9	7.5	---	---
MONTH	8.8	7.8	8.6	7.7	8.3	7.1	8.8	7.4	8.7	7.4	9.0	7.2
YEAR	9.0	7.1										

LITTLE MIAMI RIVER BASIN

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	20.5	18.5	14.5	13.0	8.0	6.0	1.0	.5	.5	.5	1.0	.5
2	19.0	17.0	15.0	12.5	7.5	7.0	.5	.0	.5	.5	.5	.5
3	17.0	15.5	15.5	14.0	7.0	6.5	.5	.0	.5	.5	1.0	.5
4	16.5	14.5	16.0	15.0	6.5	6.0	.5	.0	1.0	.5	1.5	.5
5	16.0	14.5	17.5	16.0	6.0	4.5	.5	.5	.5	.5	1.0	.5
6	17.5	15.0	17.5	17.0	4.5	2.5	1.5	.5	.5	.5	2.0	.5
7	16.0	14.0	17.0	16.5	2.5	.5	2.0	.0	.5	.5	1.0	.5
8	14.5	14.0	17.5	16.5	1.0	.5	3.5	2.0	1.0	.5	.5	.5
9	14.5	12.5	17.0	16.5	1.0	.5	2.0	.0	1.0	.5	1.5	.5
10	14.0	12.0	16.5	11.5	.5	.5	.5	.0	1.0	.5	2.5	.5
11	12.5	10.5	11.0	9.0	1.0	.5	.5	.0	1.0	.5	1.5	.5
12	11.0	10.0	9.5	8.0	1.0	.0	.5	.0	1.0	.5	.5	.5
13	11.5	9.5	7.5	6.5	.5	.0	.5	.5	.5	.5	1.5	.5
14	12.5	10.0	7.0	6.0	4.0	.0	.5	.5	1.0	.5	1.5	1.0
15	12.0	10.0	9.0	7.0	4.5	4.0	.5	.0	.5	.5	1.5	1.0
16	11.5	10.5	10.0	9.0	4.0	3.5	.5	.0	.5	.0	2.0	1.5
17	11.0	9.0	10.0	9.0	5.0	4.0	.5	.5	1.0	.0	2.5	2.0
18	12.0	9.5	9.0	7.5	6.0	5.0	.5	.5	1.0	.0	2.5	1.5
19	11.5	10.5	7.5	7.0	6.5	5.5	.5	.5	.5	.0	4.5	3.0
20	12.0	10.0	8.5	7.0	6.0	5.0	.5	.5	.5	.0	5.5	4.0
21	12.5	10.0	9.5	8.5	5.0	3.0	.5	.5	1.0	.0	6.0	5.5
22	13.5	11.0	9.5	8.0	3.0	1.5	.5	.0	1.0	.0	6.5	5.0
23	14.0	12.5	9.0	8.0	2.5	2.0	.5	.0	.5	.0	6.0	5.5
24	14.5	12.5	9.0	8.0	3.5	2.0	.5	.5	1.0	.0	5.5	5.0
25	14.0	13.5	8.0	6.5	3.5	1.5	.5	.5	1.0	.0	5.5	4.5
26	14.0	14.0	6.5	3.5	1.5	.0	.5	.0	1.0	.0	5.5	5.5
27	15.0	14.0	3.5	2.5	.5	.0	.5	.0	1.5	.0	5.5	5.0
28	14.5	13.5	3.0	2.0	.5	.0	.5	.0	1.5	.5	7.0	4.5
29	14.5	12.5	3.0	2.5	.5	.0	.5	.0	---	---	9.0	6.5
30	14.0	11.5	6.0	3.0	.5	.0	.5	.0	---	---	10.0	8.0
31	14.0	12.0	---	---	1.0	.5	.5	.5	---	---	12.0	9.0
MONTH	20.5	9.0	17.5	2.0	8.0	.0	3.5	.0	1.5	.0	12.0	.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	14.0	11.0	16.0	13.0	25.5	22.5	29.5	26.5	25.5	22.5	22.0	20.5
2	13.0	12.0	16.0	13.0	24.5	23.5	26.0	24.5	27.5	24.0	23.0	21.0
3	13.0	11.5	15.5	13.5	25.0	22.5	24.0	22.5	26.5	25.0	24.0	21.5
4	14.0	12.5	15.0	13.0	23.5	21.5	24.0	22.0	26.5	24.0	24.5	22.5
5	14.5	12.5	13.0	12.0	24.0	21.0	24.0	22.0	25.0	23.0	24.5	22.0
6	14.0	13.0	12.5	11.0	23.0	21.5	25.5	22.0	24.0	22.5	25.5	22.5
7	15.5	12.5	12.0	11.5	23.0	21.0	27.0	24.0	23.5	22.5	26.0	23.0
8	14.5	13.5	14.0	12.0	23.0	21.5	28.0	25.0	24.0	21.5	27.0	23.5
9	15.0	12.5	15.0	13.5	23.0	20.5	28.0	25.5	25.5	22.5	27.5	24.5
10	16.5	13.5	16.5	14.0	23.5	20.5	27.5	26.0	25.5	24.0	27.5	25.0
11	16.5	15.0	17.5	14.5	24.0	21.0	27.0	24.0	24.5	22.0	27.0	25.0
12	16.0	13.5	17.0	16.5	24.0	22.5	26.5	23.5	22.5	22.5	26.5	25.0
13	15.0	14.0	17.0	14.5	24.0	21.5	26.0	23.5	24.5	22.0	26.5	24.5
14	15.5	14.5	14.5	11.5	23.0	20.5	27.5	24.0	26.0	23.5	26.0	25.0
15	16.0	13.5	12.5	11.5	22.0	22.0	26.5	25.5	27.5	24.0	26.0	23.5
16	14.5	13.0	13.0	12.0	23.5	20.5	27.5	24.0	27.5	26.0	25.5	23.5
17	14.5	12.0	14.5	12.5	25.0	22.0	27.5	24.0	28.5	25.0	24.5	23.0
18	13.5	11.0	17.0	14.0	26.5	23.5	27.5	24.5	28.0	25.5	24.5	22.5
19	11.5	10.5	20.0	16.0	26.5	24.0	28.5	25.0	28.5	26.0	26.5	23.5
20	11.0	9.0	21.0	18.0	27.0	24.0	30.0	27.0	27.0	24.5	27.5	25.0
21	9.0	8.0	21.0	19.0	25.0	19.0	30.0	28.0	26.5	23.5	27.5	25.0
22	10.0	7.5	20.0	17.5	25.5	23.0	30.5	27.5	26.5	23.0	26.0	23.0
23	10.0	9.5	19.5	18.0	25.0	22.5	30.0	27.5	27.0	24.0	23.0	20.5
24	11.5	9.5	18.5	18.0	26.5	22.5	28.5	24.0	28.5	25.0	23.0	21.0
25	11.0	10.5	20.0	17.0	26.0	23.5	25.0	24.5	28.5	26.5	22.5	20.5
26	11.5	10.0	21.5	18.0	25.5	24.0	27.0	23.5	28.0	26.0	21.5	19.0
27	13.0	10.5	23.0	19.5	27.0	23.5	27.0	25.5	27.0	25.0	21.0	19.0
28	15.0	12.0	23.5	20.5	29.5	26.0	27.5	24.5	26.0	24.5	20.5	19.0
29	15.0	13.0	24.5	21.5	30.0	26.5	27.5	24.5	24.5	23.5	20.0	18.0
30	15.5	13.5	23.5	22.0	31.0	26.5	27.5	23.5	24.0	21.0	19.0	18.5
31	---	---	25.0	21.5	---	---	25.0	23.5	21.0	20.0	---	---
MONTH	16.5	7.5	25.0	11.0	31.0	19.0	30.5	22.0	28.5	20.0	27.5	18.0
YEAR	31.0	.0										

03285500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.9	5.6	9.2	8.2	10.8	10.2	13.3	13.2	13.2	13.0	15.0	13.3
2	6.5	5.8	9.3	8.0	10.8	10.4	13.4	13.2	13.0	12.9	15.0	13.5
3	7.1	6.5	8.6	7.5	11.0	10.8	13.6	13.0	13.5	12.9	15.0	13.4
4	7.6	7.2	8.4	7.4	11.1	11.0	---	---	13.3	13.0	15.0	13.3
5	7.9	7.5	8.9	7.6	11.3	11.0	13.6	13.1	13.2	13.0	15.0	13.6
6	7.9	7.6	8.1	7.1	11.3	10.0	13.3	12.8	13.4	13.1	15.0	13.7
7	8.2	7.5	7.8	6.8	12.3	10.7	12.9	12.5	13.6	13.4	15.0	13.5
8	8.0	7.7	8.2	7.0	12.5	12.2	12.9	12.3	13.8	13.7	14.8	13.4
9	8.2	7.7	8.0	7.1	12.6	12.2	13.6	12.8	13.8	13.5	15.0	13.3
10	8.6	8.1	8.3	7.3	12.8	12.6	13.7	13.3	13.8	13.4	15.0	13.5
11	8.6	8.3	9.9	8.1	12.6	12.5	13.8	13.4	13.8	13.4	14.1	13.2
12	8.7	8.6	10.3	9.2	13.7	12.1	13.8	13.4	13.9	13.4	13.2	13.0
13	---	---	11.0	9.7	13.6	13.2	13.4	12.8	13.6	13.2	13.2	12.4
14	---	---	11.2	10.0	13.1	11.6	13.0	12.8	13.8	13.2	12.8	12.2
15	---	---	11.1	9.9	12.3	11.6	13.4	12.9	14.4	13.5	12.9	12.0
16	---	---	11.3	9.5	12.5	12.3	13.3	13.0	14.9	14.1	13.0	12.0
17	---	---	10.5	9.9	12.4	11.9	13.2	12.7	15.0	14.1	12.9	12.5
18	9.5	9.1	10.4	9.9	11.9	11.6	13.1	12.8	14.8	14.1	13.1	12.3
19	10.0	8.6	10.7	10.2	12.0	11.7	13.2	12.8	15.0	14.1	12.8	12.5
20	10.4	9.6	10.7	10.3	12.0	11.8	13.1	12.6	15.0	14.1	12.6	12.3
21	10.4	9.4	10.3	9.6	12.5	12.0	12.8	12.5	15.0	14.2	12.3	12.0
22	10.3	9.2	10.3	9.8	12.9	12.5	13.1	12.5	15.0	14.2	12.2	12.0
23	10.0	9.0	10.4	10.1	13.1	12.8	13.2	12.7	15.0	14.2	12.3	12.0
24	10.8	8.9	10.5	10.1	12.9	12.5	14.0	12.7	15.0	14.0	12.2	12.0
25	10.1	8.9	10.6	10.4	12.7	12.5	13.7	12.4	15.0	13.9	12.3	11.9
26	9.2	7.7	11.6	10.5	13.1	12.7	12.9	12.6	15.0	13.9	12.2	11.9
27	7.9	7.2	11.8	11.3	13.3	13.0	12.8	12.5	15.0	13.6	12.1	11.9
28	8.7	7.9	12.5	11.7	13.5	13.2	12.8	12.4	15.0	13.5	12.2	11.9
29	9.6	8.4	12.3	11.9	13.6	13.2	12.7	12.3	---	---	11.8	11.5
30	9.6	8.6	11.9	10.6	13.5	13.3	12.8	12.4	---	---	11.5	11.2
31	9.5	8.5	---	---	13.4	13.3	13.2	12.5	---	---	11.2	10.7
MONTH	10.8	5.6	12.5	6.8	13.7	10.0	14.0	12.3	15.0	12.9	15.0	10.7

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.6	10.2	13.6	10.6	9.8	7.8	9.6	6.8	8.9	7.5	7.4	7.2
2	10.6	10.1	13.4	10.2	9.6	7.2	7.7	6.9	9.1	6.8	7.4	7.1
3	10.9	10.3	13.3	10.1	10.7	7.4	7.2	4.6	7.7	6.4	7.5	7.2
4	10.8	10.2	11.2	10.0	10.6	7.9	7.5	7.2	7.5	6.5	7.8	7.1
5	11.3	10.2	11.3	9.5	11.0	7.9	7.9	7.5	7.8	6.9	8.1	7.3
6	10.9	10.0	12.9	9.9	10.3	7.4	8.2	7.7	7.6	6.8	8.6	7.1
7	11.7	9.9	12.1	10.6	9.6	7.7	8.3	7.4	7.1	6.6	9.1	7.0
8	11.7	9.9	11.0	9.6	7.8	7.2	10.6	7.5	6.9	6.7	9.7	7.1
9	12.9	10.0	9.8	9.2	7.4	6.6	11.4	7.7	6.9	6.5	10.5	6.9
10	13.0	9.9	9.9	9.0	7.4	6.3	12.3	7.7	6.8	6.3	10.9	6.8
11	12.7	9.2	12.0	8.9	6.4	6.1	14.2	8.0	6.8	5.8	11.1	6.7
12	14.0	9.6	11.1	9.2	7.7	6.0	16.4	8.4	7.0	6.7	9.9	6.6
13	12.4	8.0	9.8	8.3	8.7	6.8	14.0	8.2	6.9	6.4	10.2	6.4
14	15.6	10.7	9.9	8.8	9.4	7.9	15.0	7.3	7.1	6.4	9.4	6.4
15	16.7	9.6	10.0	8.0	9.2	7.9	12.9	7.5	7.2	6.4	11.0	6.6
16	15.4	9.8	9.9	9.6	9.9	7.9	15.6	7.2	7.5	6.6	10.2	6.7
17	17.3	10.1	10.1	9.4	10.2	7.7	16.1	7.3	8.4	6.6	7.8	6.3
18	12.6	10.9	10.1	8.5	11.5	7.4	20.0	7.9	9.0	6.6	6.5	5.8
19	11.4	10.6	10.1	8.2	9.4	7.0	20.0	8.7	10.7	6.7	7.1	6.5
20	11.6	10.6	10.0	7.9	8.9	7.1	17.5	8.9	10.8	6.9	7.5	6.4
21	11.9	11.6	10.6	8.2	7.2	7.3	---	---	11.0	7.2	7.8	6.3
22	12.9	11.9	11.0	8.2	8.3	6.7	---	---	12.0	6.8	8.4	6.7
23	12.3	11.7	10.2	8.2	8.3	7.0	---	---	12.8	7.2	9.2	7.4
24	12.8	11.7	8.8	8.2	9.1	7.2	---	---	14.7	7.2	9.4	7.3
25	11.8	11.2	9.5	8.3	9.3	7.2	---	---	14.1	7.3	9.7	7.5
26	11.4	11.1	10.1	8.2	7.6	7.2	---	---	11.7	6.8	10.2	7.9
27	11.9	10.9	10.2	8.2	6.7	6.3	---	---	7.4	6.3	10.2	7.8
28	12.5	11.1	10.0	8.1	6.3	6.2	12.1	7.2	6.4	5.7	10.9	7.8
29	12.6	10.7	9.8	7.8	6.7	5.9	15.0	7.7	6.5	6.0	11.1	8.2
30	13.5	10.2	9.6	7.6	8.3	6.4	10.1	7.7	6.9	6.4	9.9	8.1
31	---	---	10.1	7.8	---	---	9.6	7.9	7.5	6.8	---	---
MONTH	17.3	8.0	13.6	7.6	11.5	5.9	20.0	4.6	14.7	5.7	11.1	5.8
YEAR	20.0	4.6										

03246200 EAST FORK LITTLE MIAMI RIVER NEAR MARATHON, OH

LOCATION.--Lat 39°06'52", long 84°01'29", Clermont County, Hydrologic Unit 05090202, on right bank at downstream side of bridge on Blue Sky Park Road, 500 ft (152 m) upstream from Fivemile Creek, 1.0 mi (1.6 km) downstream from Sixmile Creek, 2.3 mi (3.7 km) southwest of Marathon, and at mile 44.2 (77.1 km).

DRAINAGE AREA.--195 mi² (505 km²).

PERIOD OF RECORD.--August 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 842.32 ft (256.739 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period, which are fair. Water-quality data collected at this site 1969 to 1977. Sediment data collected 1970 to 1974.

AVERAGE DISCHARGE.--10 years, 239 ft³/s (6.77 m³/s), 16.64 in/yr (423 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,400 ft³/s (323 m³/s) Apr. 2, 1970, Feb. 24, 1975; maximum gage height, 18.57 ft (5.660 m) Apr. 2, 1970, in gage well, about 19.8 ft (6.04 m) outside; minimum discharge, 0.50 ft³/s (1.42 m³/s) Oct. 15, 16, 17, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s (85.0 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 1	1930	4020	114	12.34	3.761	Jan. 8	1700	5420	153	13.83	4.215
Dec. 1	0730	4380	124	12.74	3.883	Mar. 15	0230	*10700	303	*18.15	5.532
Dec. 5	1930	5040	143	13.44	4.097	Mar. 26	1030	4200	119	12.51	3.813
Dec. 14	1300	4840	137	13.24	4.036	May 13	1800	3340	94.6	11.51	3.508

Minimum 3.3 ft³/s (0.093 m³/s) Sept. 28, 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1680	32	3320	47	350	51	122	82	42	39	54	316
2	1190	26	753	47	288	51	107	68	38	387	43	122
3	215	24	392	37	240	51	90	57	34	370	85	60
4	97	22	390	31	205	51	83	81	31	181	45	37
5	52	22	3300	27	175	51	86	149	29	85	26	26
6	36	20	2220	32	98	52	90	112	28	52	20	20
7	34	25	390	74	56	52	119	79	29	38	816	17
8	106	44	270	3370	53	54	99	170	81	31	229	14
9	355	53	552	2170	52	60	82	751	562	25	86	12
10	205	56	408	340	52	140	73	367	201	21	41	11
11	99	81	262	229	52	400	72	163	93	18	355	10
12	54	72	214	168	51	1160	76	112	60	16	276	9.7
13	36	53	357	126	51	3400	78	1900	47	16	128	9.2
14	28	43	4000	106	51	8060	58	1370	40	16	67	8.8
15	23	38	1700	94	51	7760	48	984	35	14	42	8.4
16	20	79	479	87	51	1760	41	458	31	14	30	8.6
17	18	826	320	82	52	902	40	430	25	13	22	8.4
18	16	413	271	78	51	533	45	267	23	11	19	8.6
19	15	160	259	75	51	562	120	170	52	10	17	14
20	15	108	214	73	51	833	252	124	50	9.5	15	13
21	14	947	214	72	50	938	308	135	255	8.8	14	9.8
22	14	796	146	71	50	846	159	153	402	8.2	14	7.7
23	14	277	113	71	51	376	128	120	122	7.6	11	6.4
24	13	194	102	71	51	311	237	424	62	47	9.6	5.7
25	14	143	131	117	51	519	430	308	40	373	8.6	5.2
26	373	116	125	1920	51	3020	800	157	491	121	7.8	4.8
27	306	90	87	1500	52	622	298	109	243	46	7.8	4.3
28	150	76	50	1160	52	350	168	82	131	25	23	3.6
29	83	71	41	880	---	243	109	65	170	18	454	3.4
30	53	865	35	670	---	174	92	55	64	18	274	3.7
31	38	---	43	500	---	139	---	47	---	61	1060	---
TOTAL	5446	5772	21158	14325	2489	33521	4510	9549	3511	2100.1	4299.8	788.3
MEAN	176	192	683	462	88.9	1081	150	308	117	67.7	139	26.3
MAX	1680	947	4000	3370	350	8060	800	1900	562	387	1060	316
MIN	13	20	35	27	50	51	40	47	23	7.6	7.8	3.4
CFSM	.90	.99	3.50	2.37	.46	5.54	.77	1.58	.60	.35	.71	.14
IN.	1.04	1.10	4.04	2.73	.47	6.39	.86	1.82	.67	.40	.82	.15

CAL YR 1977 TOTAL 77199.4 MEAN 212 MAX 4000 MIN 3.4 CFSM 1.09 IN 14.73
WTR YR 1978 TOTAL 107469.2 MEAN 294 MAX 8060 MIN 3.4 CFSM 1.51 IN 20.50

03247050 EAST FORK LITTLE MIAMI RIVER NEAR BATAVIA, OH

LOCATION.--Lat 39°03'36", long 84°10'32", Clermont County, Hydrologic Unit 05090202, on right bank on Elk Lick Road, 230 ft (70 m) upstream from unnamed right bank tributary, 1,400 ft (427 m) upstream from Lucy Run, 1.3 mi (2.1 km) south of Batavia, and at mile 15.7 (25.3 km).

DRAINAGE AREA.--352 mi² (912 km²), includes that of unnamed tributary.

PERIOD OF RECORD.--July 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 571.68 ft (174.248 m) National Geodetic Vertical Datum of 1929. Prior to July 17, 1968, nonrecording gage 1,100 ft (335 m) downstream at same datum.

REMARKS.--Records good except for the winter period, which are fair. Flow regulated by East Fork Lake, since 1977. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--13 years, 420 ft³/s (11.89 m³/s) .

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,700 ft³/s (813 m³/s) Apr. 2, 1970, gage height, 20.31 ft (6.190 m); minimum daily, 0.14 ft³/s (0.004 m³/s) Sept. 23, 27, 1967. Maximum discharge since start of construction of East Fork Dam 31,000 ft³/s (878 m³/s) Aug. 30, 1974, gage height, 20.80 ft (6.400 m) in gage well, 21.8 ft (6.645 m) from floodmarks, result of failure of cofferdam.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1964 reached a stage of 21.46 ft (6.541 m) at site 1,100 ft (335 m) downstream from information by local resident, discharge, about 32,000 ft³/s (906 m³/s), from flood study.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,250 ft³/s (149 m³/s) Dec. 15, gage height, 12.22 ft (3.724 m); minimum daily, 21 ft³/s (0.59 m³/s) July 19-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	75	3800	106	615	91	1090	216	95	160	101	889
2	2160	69	3630	106	530	89	443	97	97	176	95	643
3	809	59	1910	86	401	89	443	66	95	258	99	251
4	185	53	650	84	339	90	438	163	95	321	160	169
5	110	50	2680	90	285	89	285	330	97	306	81	496
6	84	56	4310	99	180	90	51	295	95	186	57	907
7	66	134	3430	125	90	94	50	201	101	71	224	790
8	103	120	732	2610	90	99	48	190	118	71	411	798
9	482	113	64	4530	90	103	50	449	417	71	449	831
10	423	110	34	3780	90	128	81	740	465	73	443	791
11	228	139	30	1850	90	163	166	740	90	69	438	860
12	118	106	30	381	90	295	145	732	88	69	422	973
13	88	90	47	230	90	308	154	1120	88	438	411	962
14	69	77	2550	200	90	500	240	1240	88	438	357	956
15	57	67	4700	170	90	232	240	2080	71	38	512	929
16	51	131	2840	160	90	220	190	3390	39	36	588	895
17	44	1040	740	150	90	208	108	1840	57	36	308	861
18	41	878	339	142	90	477	97	812	84	35	30	819
19	39	264	339	140	90	772	34	406	86	21	28	755
20	35	157	339	140	90	756	51	160	86	21	27	688
21	35	1010	780	140	89	853	106	157	88	21	27	746
22	34	2070	3110	140	89	1270	103	154	120	21	27	883
23	32	636	1630	145	88	949	381	267	224	21	27	869
24	30	367	193	148	88	482	588	870	220	57	27	856
25	34	285	193	530	89	524	477	812	160	25	27	831
26	625	228	197	2930	92	1250	658	183	120	23	27	757
27	573	190	166	2810	92	2740	913	276	197	22	27	708
28	279	166	139	2170	92	3060	602	197	317	43	35	571
29	161	160	110	1720	---	3000	197	125	317	90	193	261
30	113	922	108	1190	---	3320	276	106	276	69	438	245
31	90	---	97	896	---	2950	---	92	---	92	604	---
TOTAL	7251	9824	39917	28000	4329	25291	8705	18506	4491	3380	6700	21990
MEAN	234	327	1288	903	155	816	290	597	150	109	216	733
MAX	2160	2070	4700	4530	615	3320	1090	3390	465	438	604	973
MIN	30	50	30	84	88	89	34	66	39	21	27	169

CAL YR 1977 TOTAL 128628.3 MEAN 352 MAX 4700 MIN 3.4
WTR YR 1978 TOTAL 178384.0 MEAN 489 MAX 4700 MIN 21

03247500 EAST FORK LITTLE MIAMI RIVER AT PERINTOWN, OH

LOCATION.--Lat 39°08'13", long 84°14'17", Clermont County, Hydrologic Unit 05090202, on left bank at downstream side of highway bridge at Perintown, 0.2 mi (0.3 km) downstream from Sugarcamp Run, 5 mi (8 km) upstream from mouth, and at mile 6.4 (10.3 km).

DRAINAGE AREA.--476 mi² (1,233 km²).

PERIOD OF RECORD.--May 1915 to September 1917, October 1917 to May 1920 (gage heights only), January 1925 to current year.

GAGE.--Water-stage recorder. Datum of gage is 507.03 ft (154.543 m) National Geodetic Vertical Datum of 1929. Prior to Feb. 6, 1940, nonrecording gage, at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Occasional regulation by Stonelick Creek 14 mi (23 km) upstream. Surface area at spillway level, 171 acres (69 ha²). Flow regulated by East Fork Lake, since 1977. Water-quality data collected at this site 1964 to 1977.

AVERAGE DISCHARGE.--55 years (1915-17, 1925-78), 542 ft³/s 15.35 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,400 ft³/s (1,200 m³/s) Mar. 10, 1964, gage height, 23.84 ft (7.266 m); minimum daily, 0.4 ft³/s (0.011 m³/s) July 24, 1930, Sept. 11, 12, 23, 1939; minimum gage height, -0.18 ft (-0.055 m) Oct. 3-7, 1917. Maximum discharge since start of construction of East Fork Dam 23,200 ft³/s (657 m³/s) Aug. 30, 1974, gage height, 19.52 ft (5.950 m), result of failure of cofferdam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,810 ft³/s (249 m³/s) Mar. 14, gage height, 11.76 ft (3,584 m); minimum daily, 34 ft³/s (0.96 m³/s) July 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	894	113	4640	140	537	126	1380	359	131	262	185	1220
2	1890	99	3200	137	449	119	586	168	127	524	139	925
3	1050	92	2020	108	363	126	576	117	125	518	209	416
4	258	81	764	110	312	120	567	233	122	474	233	244
5	157	76	4230	120	271	117	475	535	121	419	145	467
6	124	84	3770	139	222	120	129	450	120	331	94	981
7	102	181	3020	179	130	135	137	302	176	108	764	915
8	189	171	1110	4570	129	142	119	654	388	97	607	842
9	501	164	432	4130	131	188	115	1270	927	93	606	884
10	470	146	212	3410	130	358	107	1070	829	94	579	848
11	298	190	126	2030	128	738	244	930	171	98	657	873
12	181	155	110	380	127	1950	238	913	145	89	602	1010
13	126	128	292	301	130	2250	192	3020	139	367	556	993
14	100	110	3910	266	131	5800	315	2560	130	870	466	994
15	85	97	4240	232	132	1770	311	2660	124	64	586	970
16	76	152	2750	192	126	930	283	3390	64	56	803	946
17	68	1580	962	180	128	663	165	2280	59	52	461	916
18	61	1220	435	184	129	695	255	1060	102	51	103	878
19	60	423	410	186	133	1110	221	692	504	43	58	818
20	57	272	406	184	134	1080	235	283	200	34	56	757
21	55	1830	650	184	125	1290	270	287	682	35	52	760
22	54	2170	2520	183	123	1490	213	260	271	36	45	933
23	52	796	1830	176	124	1320	455	354	329	36	42	925
24	51	413	272	180	122	686	974	1160	306	642	40	914
25	59	321	251	748	122	1010	798	1210	237	365	38	894
26	1070	258	220	3320	123	2230	946	318	245	101	45	831
27	819	216	204	2550	124	2920	1140	377	265	58	46	782
28	400	193	144	2030	124	3180	860	318	418	45	70	717
29	254	180	141	1530	---	3000	308	211	406	105	334	284
30	175	1840	145	1080	---	3240	352	161	391	192	1240	272
31	135	---	134	787	---	3020	---	137	---	403	1740	---
TOTAL	9871	13751	43550	29946	4959	41923	12966	27739	8254	6662	11601	24209
MEAN	318	458	1405	966	177	1352	432	895	275	215	374	807
MAX	1890	2170	4640	4570	537	5800	1380	3390	927	870	1740	1220
MIN	51	76	110	108	122	117	107	117	59	34	38	244

CAL YR 1977 TOTAL 158010 MEAN 433 MAX 4640 MIN 14
WTR YR 1978 TOTAL 235431 MEAN 645 MAX 5800 MIN 34

03255500 MILL CREEK AT READING, OH

LOCATION.--Lat 39°13'14", long 84°26'49", in sec. 32, R.1, T.4, Hamilton County, Hydrologic Unit 05090203, on right bank at upstream side of Koehler Street Bridge at Reading, 1.0 mi (1.6 km) upstream from West Fork Mill Creek, and 13.0 mi (20.9 km) upstream from mouth.

DRAINAGE AREA.--73.0 mi² (189 km²).

PERIOD OF RECORD.--October 1938 to April 1939, June 1939 to current year.

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 527.00 ft (160.630 m) Ohio River datum. Prior to Oct. 1, 1951, water-stage recorder or nonrecording gage at same site at datum 4.00 ft (1.219 m) higher. Oct. 1, 1951, to Apr. 25, 1954, nonrecording gage at present site and datum.

REMARKS.--Records good except those for periods of ice effect, which are fair. Some diversion and ground water pumpage from Mill Creek and Great Miami River basin by industrial plants of the greater Cincinnati area upstream from station. Water-quality data collected at this site 1965 to 1977.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,780 ft³/s (164 m³/s) Mar. 6, 1945, gage height, 20.00 ft (6.096 m) present datum; no flow for many days in 1940-41, 1944, 1951.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,700 ft³/s (48.1 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft3/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 1	0830	*3750	106	*14.32	4.365	Dec. 14	0830	2110	59.8	10.56	3.219
Dec. 5	0830	1980	56.1	10.28	3.133	Mar. 14	0530	2570	72.8	11.58	3.530

Minimum daily 7.5 ft³/s (0.21 m³/s) Sept. 24, 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1350	26	653	32	52	38	53	39	24	63	18	259
2	163	23	215	26	48	37	43	38	23	165	15	86
3	63	22	135	26	42	35	41	34	19	84	34	44
4	41	21	112	25	38	33	44	83	15	31	32	29
5	32	18	841	41	34	33	47	63	17	20	16	22
6	38	27	215	57	34	32	49	41	18	17	13	21
7	26	37	97	133	30	47	63	30	58	15	19	19
8	123	30	88	926	29	47	42	215	191	16	19	17
9	73	30	155	260	28	64	37	249	61	12	18	15
10	42	32	71	150	27	150	35	83	24	12	100	13
11	32	21	54	78	26	368	66	58	16	13	118	12
12	26	16	50	47	25	719	53	78	39	12	42	13
13	24	13	228	40	23	798	37	789	26	58	17	12
14	23	14	1240	35	22	1650	32	585	17	22	15	12
15	21	20	390	33	21	649	28	403	16	13	15	12
16	19	55	179	31	21	359	25	182	16	11	15	20
17	20	163	117	31	20	198	26	140	13	11	14	23
18	21	60	289	31	20	119	182	95	34	12	23	14
19	21	33	133	30	20	99	137	75	119	13	18	13
20	19	70	114	27	22	91	114	60	26	13	19	11
21	16	513	82	26	23	108	60	58	79	13	13	10
22	14	130	64	29	24	126	43	46	26	14	13	9.3
23	12	110	54	27	23	91	85	71	19	31	14	7.8
24	14	70	50	30	23	80	101	93	15	375	14	7.5
25	82	49	68	238	24	160	147	48	20	72	14	7.5
26	422	37	39	632	23	394	163	39	163	43	35	8.3
27	83	28	36	215	25	152	76	30	36	21	93	8.6
28	47	35	36	128	30	101	55	25	25	16	225	8.8
29	34	37	33	89	---	80	46	22	21	14	125	8.4
30	24	490	33	70	---	66	47	26	18	90	637	9.3
31	26	---	29	61	---	60	---	25	---	37	596	---
TOTAL	2951	2230	5900	3604	777	6974	1977	3823	1194	1339	2359	752.5
MEAN	95.2	74.3	190	116	27.8	225	65.9	123	39.8	43.2	76.1	25.1
MAX	1350	513	1240	926	52	1650	182	789	191	375	637	259
MIN	12	13	29	25	20	32	25	22	13	11	13	7.5

CAL YR 1977 TOTAL 22257.0 MEAN 61.0 MAX 1350 MIN 2.1
WTR YR 1978 TOTAL 33880.5 MEAN 92.8 MAX 1650 MIN 7.5

03286500 WEST FORK MILL CREEK LAKE NEAR GREENHILLS, OH

LOCATION.--Lat 39°15'38", long 84°29'41", in SE 1/4 sec.17, T.3, R.1, Hamilton County, Hydrologic Unit 05090201, in gate house of dam on West Fork Mill Creek, 1.2 mi (1.9 km) east of Greenhills.

DRAINAGE AREA.--29.9 mi² (77.4 km²).

PERIOD OF RECORD.--April 1953 to current year. Prior to October 1971, published as West Fork Mill Creek Reservoir near Greenhills, Ohio.

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 600.00 ft (182.880 m) National Geodetic Vertical Datum of 1912 (levels by Corps of Engineers); gage readings have been reduced to elevations above National Geodetic Vertical Datum.

REMARKS.--Reservoir is formed by earthfill dam with concrete spillway; operation for flood control began Dec. 20, 1952; storage to maintain conservation pool began Apr. 19, 1953. Usable capacity 11,310 acre-ft (13.9 hm³) between elevations 655.0 ft (199.64 m), lowest outlet, and 702.0 ft (213.97 m), crest of spillway, of which 1,470 acre-ft (1.81 hm³) is in conservation pool. Dead storage below elevation 655.0 ft (199.64 m), 65 acre-ft (80,100 m³). Figures given herein represent usable contents. Reservoir is used for flood control and recreation. There are no gates on spillway and all regulation is done by gates in conduit through dam.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 9,680 acre-ft (11.9 hm³) Jan. 22, 1959, elevation, 698.95 ft (213.040 m); minimum, 729 acre-ft (899,000 m³) Feb. 26, 1968, elevation, 670.00 ft (204.216 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 4,590 acre-ft (5.66 hm³) Mar. 15, elevation, 686.81 ft (209.340 m); minimum, 1,470 acre-ft (1.81 hm³) June 12, elevation, 675.03 ft (205.749 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	675.13	1490	--
Oct. 31	675.17	1500	+10
Nov. 30	677.60	1990	+490
Dec. 31	675.19	1500	-490
CAL YR 1977	--	--	+10
Jan. 31	675.51	1560	+60
Feb. 28	675.30	1520	-40
Mar. 31	675.10	1490	-30
Apr. 30	675.24	1510	+20
May 31	675.19	1500	-10
June 30	675.14	1490	-10
July 31	675.27	1520	+30
Aug. 31	676.92	1850	+330
Sept. 30	675.23	1510	-340
WTR YR 1978	--	--	+20

03257500 WEST FORK MILL CREEK AT WOODLAWN, OH

LOCATION.--Lat 39°15'14", long 84°28'13", in NE 1/4 sec.10, R.1, T.3, Hamilton County, Hydrologic Unit 05090203, on left bank at upstream side of Riddle Road Bridge in Woodlawn, 0.5 mi (0.8 km) upstream from small left bank tributary, 1.9 mi (3.1 km) downstream from West Fork Mill Creek Dam, and 4.0 mi (6.4 km) upstream from mouth.

DRAINAGE AREA.--32.2 mi² (83.4 km²).

PERIOD OF RECORD.--December 1952 to current year.

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 570.00 ft (173.736 m) Corps of Engineers bench mark.

REMARKS.--Records good except those for winter period, and below 3.8 ft³/s (0.11 m³/s), which are fair. Flow regulated by West Fork Mill Creek Reservoir 1.9 mi (3.1 km) upstream beginning 1953 (see station 03256500). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--25 years (1953-78), 31.3 ft³/s (0.886 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,000 ft³/s (56.6 m³/s) Apr. 4, 1956, gage height, 6.82 ft (2.079 m); no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,390 ft³/s (39.4 m³/s) Dec. 14, gage height, 9.11 ft (2.777 m); minimum daily, 0.22 ft³/s (0.006 m³/s) Aug. 22-24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	337	.80	319	4.1	17	6.1	12	15	2.5	22	17	171
2	419	1.1	157	4.0	15	6.1	10	10	2.0	220	.32	1.1
3	5.1	.80	38	3.9	14	6.1	10	1.1	.44	205	8.0	2.5
4	5.1	.80	42	3.9	14	6.2	10	30	.35	25	10	2.5
5	4.1	1.8	340	7.0	14	6.6	10	41	.35	18	2.0	2.5
6	2.8	5.6	196	20	15	9.0	10	23	.32	14	1.8	2.2
7	10	23	31	50	10	11	21	11	29	8.0	1.8	2.2
8	90	15	19	160	9.0	12	19	34	93	4.1	1.6	2.2
9	18	26	98	105	8.0	13	15	214	34	4.1	.54	2.2
10	14	11	17	54	7.3	22	14	102	18	1.4	5.6	.80
11	6.7	8.8	22	24	6.9	185	27	34	6.7	.25	73	.35
12	8.8	3.2	19	13	6.6	129	26	25	2.2	.24	22	.32
13	2.2	.35	96	10	6.5	133	14	253	14	13	6.1	.35
14	.24	.92	219	8.4	6.2	93	9.6	305	6.7	31	.25	.39
15	.32	3.2	5.6	7.4	6.0	119	4.6	180	2.2	2.8	.25	2.8
16	1.8	31	36	6.9	5.8	110	4.6	92	1.8	2.2	.25	4.1
17	.35	197	167	7.2	5.6	43	4.6	66	.35	1.6	.28	10
18	.92	10	63	7.2	5.4	42	8.8	26	1.8	.24	.54	.25
19	1.4	9.6	367	6.9	5.2	42	166	21	73	.23	5.6	.25
20	2.2	23	175	6.3	5.0	471	36	15	18	.23	10	.28
21	1.4	289	30	5.8	4.9	474	35	26	12	.24	.25	.28
22	1.6	126	16	5.4	5.1	248	16	21	2.0	.24	.22	.25
23	.92	67	16	5.5	5.1	29	31	20	1.8	.25	.22	.24
24	.80	13	16	5.8	5.1	27	84	55	1.8	101	.22	.25
25	16	9.6	20	45	5.6	34	39	14	11	232	.28	.24
26	67	6.7	10	59	5.6	128	100	8.0	173	63	1.2	.24
27	128	7.4	5.1	50	5.6	41	16	5.1	31	6.7	29	.25
28	132	14	4.6	151	5.6	40	16	5.1	2.5	.28	58	.26
29	31	20	4.4	275	---	29	16	5.1	2.5	.25	116	.25
30	11	183	4.3	80	---	16	16	5.1	2.5	27	184	.29
31	.80	---	4.2	23	---	13	---	4.1	---	42	219	---
TOTAL	1320.55	1108.67	2577.2	1214.7	225.1	2544.1	802.2	1666.6	546.81	1046.35	775.32	210.84
MEAN	42.6	37.0	83.1	39.2	8.04	82.1	26.7	53.8	18.2	33.8	25.0	7.03
MAX	419	289	367	275	17	474	166	305	173	232	219	171
MIN	.24	.35	4.2	3.9	4.9	6.1	4.6	1.1	.32	.23	.22	.24

CAL YR 1977 TOTAL 13373.50 MEAN 36.6 MAX 540 MIN .09
WTR YR 1978 TOTAL 14038.44 MEAN 38.5 MAX 474 MIN .22

MILL CREEK BASIN

03259000 MILL CREEK AT CARTHAGE, OH

LOCATION.--Lat 39°12'07", long 84°28'16", in SW 1/4 sec. 1, R.1, T.3, Hamilton County, Hydrologic Unit 05090203, on right bank 100 ft (30 m) downstream from Anthony Wayne Avenue Bridge in Carthage, 1.0 mi (1.6 km) downstream from West Fork Mill Creek, and 11.0 mi (17.7 km) upstream from mouth.

DRAINAGE AREA.--115 mi² (298 km²).

PERIOD OF RECORD.--November 1946 to current year.

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 507.00 ft (157.582 m) revised Ohio River datum. Prior to Oct. 1, 1954 at site 100 ft (30 m) upstream at datum 5.00 ft (1.524 m) higher. Oct. 1, 1954 to Sept. 30, 1977 at same site at datum 5.00 ft (1.524 m) higher.

REMARKS.--Records good except those for the winter period, which are fair. Some inter-basin transfers of water between Mill Creek and Great Miami River basins by industrial and municipal operations. Flow regulated by West Fork Mill Creek Reservoir, 6.9 mi (11.1 km) upstream, beginning 1953 (see station 03256500). Water-quality data collected at this site 1965 to 1977.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,900 ft³/s (252 m³/s) Jan. 21, 1959, gage height, 21.17 ft (6.453 m) present datum, from rating curve extended above 4,000 ft³/s (79.3 m³/s) on basis of slope-area measurement of peak flow; no flow many days in 1947-48.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,560 ft³/s (129 m³/s) Oct. 1, gage height, 16.22 ft (4.944 m); minimum daily, 12 ft³/s (0.340 m³/s) Sept. 22-24, 26-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1610	25	929	4[illegible]	59	49	60	57	31	104	46	391
2	721	25	296	37	60	43	46	48	30	407	26	52
3	64	24	180	34	54	47	47	38	27	313	56	28
4	41	24	127	31	50	42	53	120	23	53	43	22
5	33	22	1100	55	50	43	53	113	25	41	26	22
6	39	29	461	78	54	50	61	73	26	33	25	20
7	31	38	144	172	45	62	76	42	98	29	30	18
8	191	33	117	1100	38	72	53	256	348	28	28	18
9	65	36	227	564	36	101	51	516	117	26	26	16
10	41	32	91	277	34	222	45	204	47	24	116	14
11	30	27	76	119	32	593	95	105	29	23	180	15
12	27	23	72	64	33	939	75	110	56	22	73	15
13	25	18	310	56	33	912	46	1080	43	83	27	15
14	23	20	1450	52	32	1790	42	1050	31	59	22	14
15	22	23	370	48	32	779	34	617	26	25	20	15
16	21	88	191	46	32	375	30	274	26	22	28	34
17	22	277	271	50	32	195	32	211	23	23	17	24
18	22	50	416	50	31	146	217	132	42	22	29	14
19	22	31	516	45	31	139	274	107	204	22	20	14
20	20	96	316	40	31	583	159	83	55	23	25	13
21	20	797	124	36	32	695	110	91	111	23	15	13
22	18	229	87	34	32	381	63	75	33	23	14	12
23	15	142	73	39	32	110	111	116	27	52	15	12
24	17	72	70	45	32	99	185	174	25	587	15	12
25	124	51	91	407	32	296	199	73	42	342	14	13
26	473	34	53	773	31	456	236	52	345	119	52	12
27	170	27	43	310	37	172	101	37	78	32	113	12
28	141	37	39	261	45	137	77	33	31	26	282	12
29	48	37	38	456	---	107	64	31	29	23	307	12
30	28	773	37	90	---	79	69	34	28	148	883	18
31	26	---	36	64	---	71	---	33	---	84	822	---
TOTAL	4150	3140	8351	5474	1072	9785	2764	5985	2056	2841	3387	902
MEAN	134	105	269	177	38.3	316	92.1	193	68.5	91.6	109	30.1
MAX	1610	797	1450	1100	60	1790	274	1080	348	587	883	391
MIN	15	18	36	31	31	42	30	31	23	22	14	12

CAL YR 1977 TOTAL 34469.5 MEAN 94.4 MAX 1610 MIN 2.4
WTR YR 1978 TOTAL 49907.0 MEAN 137 MAX 1790 MIN 12

03260700 BOKENGEHALAS CREEK NEAR DE GRAFF, OH

LOCATION.--Lat 40°20'50", long 83°53'28", in E. 1/2 sec. 3, R.14, T.2, Logan County, Hydrologic Unit 05080001, on right bank at downstream side of county road bridge, 2 mi (3 km) downstream from Bluejacket Creek, 2.8 mi (4.5 km) northeast of De Graff, and 4 mi (6 km) upstream from mouth.

DRAINAGE AREA.--36.3 mi² (94.0 km²).

PERIOD OF RECORD.--October 1957 to current year. Prior to October 1962, published as Buckongahelas Creek near Degraff.

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,008.76 ft (307.470 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Diurnal fluctuation caused by municipal plant operation in Bellefontaine, 9.8 mi (15.8 km) upstream; since storage capacity is small, daily flows are not affected appreciably. Water-quality data collected at this site 1965 to 1973.

COOPERATION.--Gage-height tapes and 8 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--21 years, 32.3 ft³/s (0.915 m³/s), 12.08 in/yr (307 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,780 ft³/s (50.4 m³/s) Jan. 21, 1959, gage height, 6.83 ft (2.082 m); minimum daily, 2.2 ft³/s (0.062 m³/s) Sept. 29, 30, Oct. 7, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft³/s (8.50 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 14	2130	607	17.2	5.22	1.591	Mar. 21	1615	338	9.57	4.28	1.305
Mar. 15	0030	*991	28.1	*5.85	1.783	Mar. 27	0145	354	10.0	4.36	1.329

Minimum daily discharge, 5.4 ft³/s (0.15 m³/s) Sept. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	8.1	62	20	33	13	66	38	19	11	7.1	7.0
2	10	8.2	30	18	32	13	58	36	18	19	7.3	6.3
3	7.0	8.0	17	21	31	13	73	33	17	24	47	6.1
4	6.8	8.1	13	20	30	13	66	34	15	17	15	5.9
5	6.6	7.8	12	17	29	13	58	38	14	14	11	6.1
6	8.4	7.3	12	17	28	13	80	32	15	13	9.9	6.1
7	7.2	9.0	9.7	19	27	13	104	31	22	12	11	5.9
8	9.1	7.7	9.4	78	26	13	69	31	21	11	10	5.9
9	10	7.2	9.2	45	25	13	57	34	16	10	9.3	5.6
10	8.1	7.8	9.0	39	24	14	49	31	14	9.9	13	5.4
11	7.6	7.2	8.8	34	23	17	51	29	12	10	9.2	5.4
12	7.4	6.7	9.4	30	22	30	45	31	17	9.6	8.8	5.9
13	7.1	6.1	11	28	21	55	38	61	25	10	8.2	5.9
14	7.0	6.1	399	27	20	528	33	71	17	9.9	8.4	5.6
15	6.9	6.2	324	26	19	638	30	62	15	9.0	8.6	6.5
16	7.0	6.7	184	25	18	333	28	56	14	8.4	8.9	5.9
17	6.8	15	164	24	17	217	28	46	13	8.1	8.3	5.9
18	7.0	8.2	135	23	17	144	39	43	12	8.1	8.0	5.6
19	7.4	6.8	99	22	16	127	66	36	19	8.1	7.5	5.9
20	7.4	6.7	81	22	16	146	126	31	14	8.0	7.3	5.9
21	7.4	8.1	64	21	15	280	144	35	14	7.8	7.0	5.5
22	7.7	7.4	47	21	15	186	100	29	13	7.5	7.3	5.6
23	7.5	7.0	39	21	14	147	75	32	12	10	7.0	5.6
24	7.7	6.6	37	25	14	109	67	80	11	13	7.0	5.4
25	8.5	6.2	71	34	14	91	55	54	11	8.5	6.8	5.6
26	9.1	6.3	42	52	14	201	60	40	11	7.9	6.8	5.9
27	8.8	5.9	32	46	14	266	50	33	12	7.5	6.5	5.6
28	8.6	5.7	28	42	14	148	45	28	12	7.3	12	5.9
29	8.2	5.7	23	39	---	110	41	26	11	7.1	7.5	5.6
30	7.9	8.9	21	37	---	86	39	24	11	7.0	8.3	5.9
31	7.6	---	20	35	---	74	---	21	---	7.1	9.1	---
TOTAL	252.8	222.7	2022.5	928	588	4064	1850	1206	447	320.8	309.1	175.8
MEAN	8.15	7.42	65.2	29.9	21.0	131	61.7	38.9	14.9	10.3	9.97	5.85
MAX	19	15	399	78	33	638	144	80	25	24	47	7.0
MIN	6.6	5.7	8.8	17	14	13	28	21	11	7.0	6.5	5.4
CFSM	.23	.20	1.80	.82	.58	3.61	1.70	1.07	.41	.28	.28	.16
IN.	.26	.23	2.07	.95	.60	4.16	1.90	1.24	.46	.33	.32	.18

CAL YR 1977 TOTAL 6768.7 MEAN 18.5 MAX 399 MIN 4.6 CFSM .51 IN 6.94
WTR YR 1978 TOTAL 12386.7 MEAN 33.9 MAX 638 MIN 5.4 CFSM .93 IN 12.69

03261500 GREAT MIAMI RIVER AT SIDNEY, OH

LOCATION.--Lat 40°17'13", long 84°09'00", Shelby County, Hydrologic Unit 05080001, on right bank 50 ft (15 m) upstream from North Street Bridge in Sidney, and 0.5 mi (0.8 km) downstream from Tawawa Creek.

DRAINAGE AREA.--541 mi² (1,401 km²).

PERIOD OF RECORD.--February 1914 to current year. Prior to October 1962, published as Miami River at Sidney.

REVISED RECORDS.--WSP 1305: 1914(M), 1922(M). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 924.70 ft (281.848 m) National Geodetic Vertical Datum of 1912. Prior to Sept. 18, 1919, nonrecording gage at site 50 ft (15) m) downstream at datum 1.76 ft (0.536 m) higher. Sept. 18, 1919, to August, 1925, nonrecording gage at site 50 ft (15 m) downstream at present datum.

REMARKS.--Records good except those for winter periods, which are fair. Water supply for city of Sidney is pumped from the Great Miami River 1,200 ft (366 m) upstream and from wells adjacent to Great Miami River upstream from station. The pumpage averaged 4.6 ft³/s (0.13 m³/s) in 1978 and is returned as sewage 1.2 mi (1.9 km) downstream from the station. Some regulation by Indian Lake, 28 mi (45 km) upstream, capacity, 45,900 acre-ft (56.6 hm³) prior to 1926; water diverted into Miami and Erie Canal at Port Jefferson, 2.8 mi (4.5 km) upstream, prior to 1926; amount of diversion not published. Sediment data collected at this site 1967 to 1975.

COOPERATION.--Gage-height tapes, and 9 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--53 years (1925-78) 474 ft³/s (13.42 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,700 ft³/s (586 m³/s) Mar. 20, 1927, gage height 14.4 ft (4.39 m), from rating curve extended above 8,700 ft³/s (195 m³/s) on basis of velocity-area studies; maximum gage height, 15.91 ft (4.849 m) Jan. 21, 1959; minimum discharge, 1.5 ft³/s (0.041 m³/s) Aug. 13, 1963, result of temporary storage behind dam upstream; minimum daily discharge, 8.0 ft³/s (0.23 m³/s) Sept. 23, 1935.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 25, 1913 reached a stage of 19.6 ft (5.97 m), present datum, discharge, 44,000 ft³/s (1,250 m³/s), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft³/s (113 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 14	2030	6200	176	9.17	2.795	Mar. 21	1800	5230	148	8.34	2.542
Mar. 15	1500	*7080	201	*9.87	3.008						

Minimum daily discharge 28 ft³/s (0.79 m³/s) Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	306	72	794	270	340	140	1480	402	223	94	55	78
2	557	60	906	230	320	140	1180	377	199	130	58	67
3	380	53	608	200	300	140	1060	297	191	442	171	59
4	233	52	446	220	290	140	986	282	203	353	181	49
5	145	49	391	230	280	140	895	303	171	256	116	47
6	110	88	409	220	270	140	1070	258	156	177	89	45
7	109	95	239	280	260	140	1840	247	167	141	103	43
8	130	84	373	779	250	140	1560	231	185	123	96	40
9	173	83	290	1070	240	140	1140	253	171	113	91	39
10	270	87	260	500	230	140	834	318	166	112	81	39
11	207	98	240	460	220	150	617	264	134	105	75	35
12	160	117	260	420	210	191	587	228	145	109	69	34
13	139	119	285	380	200	387	453	600	285	95	67	37
14	123	109	3590	360	190	3200	423	1210	357	92	65	42
15	107	81	5110	340	180	6170	347	1290	207	85	95	55
16	103	83	4000	320	180	5950	312	1020	164	81	88	65
17	160	231	3640	310	170	5070	258	779	143	77	76	62
18	120	242	3490	300	170	4200	337	604	134	81	67	50
19	81	212	3060	290	160	3810	1020	528	258	69	61	44
20	79	195	2550	280	160	3720	2250	469	207	64	56	40
21	84	201	1990	270	160	4690	2560	446	179	61	59	41
22	69	210	1480	260	150	4700	2310	438	147	53	58	36
23	61	203	1110	260	150	4290	1810	360	136	73	50	37
24	71	193	889	300	150	3680	1460	662	112	84	44	40
25	69	185	1280	380	150	3010	1310	784	107	85	44	34
26	65	181	1070	540	150	3700	1200	578	107	75	45	29
27	61	179	780	480	140	3890	880	450	102	65	56	31
28	58	171	566	440	140	3530	613	380	102	60	87	28
29	59	166	420	400	---	2980	473	331	100	59	84	29
30	81	195	360	380	---	2300	420	285	91	60	76	32
31	84	---	320	360	---	1790	---	236	---	56	86	---
TOTAL	4454	4094	41206	11529	5810	72808	31685	14910	5049	3535	2449	1307
MEAN	144	136	1329	372	208	2349	1056	481	168	114	79.0	43.6
MAX	557	242	5110	1070	340	6170	2560	1290	357	442	181	78
MIN	58	49	239	200	140	140	258	228	91	56	44	28

CAL YR 1977 TOTAL 115107 MEAN 315 MAX 5110 MIN 22
WTR YR 1978 TOTAL 198836 MEAN 545 MAX 6170 MIN 28

GREAT MIAMI RIVER BASIN

03261950 LORAMIE CREEK NEAR NEWPORT, OH

LOCATION.--Lat 40°18'25", long 84°23'02", in SE 1/4 sec. 24, T.11 N., R.4 E., Shelby County, Hydrologic Unit 05080001, right bank at downstream side of bridge on Cardo Roman Road, 1.1 mi (1.8 km) northwest of Newport, 3 mi (5 km) south of Port Loramie, 3 mi (5 km) downstream from Mile Creek, and at mile 16.5 (26.6 km).

DRAINAGE AREA.--152 mi² (394 km²).

PERIOD OF RECORD.--October 1964 to current year.

REVISED RECORDS.--WRD Ohio 1971: 1966(M).

GAGE.--Water-stage recorder. Datum of gage is 927.00 ft (282.550 m) National Geodetic Vertical Datum of 1912.

REMARKS.--Records good, except those for winter periods, which are fair. Some regulation by Lake Loramie 5 mi (8 km) upstream, capacity, 13,000 acre-ft (16.0 hm³). Sediment data collected at this site 1967 to 1975.

COOPERATION.--Gage-height tapes and 8 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--14 years, 128 ft³/s (3.625 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,370 ft³/s (95.4 m³/s) Feb. 24, 1975, gage height, 14.08 ft (4.292 m); minimum daily, 0.10 ft³/s (0.003 m³/s) Aug. 15, 16, 1965, Sept. 10-12, 14, 15, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 25, 1913 reached a stage of 17.0 ft (5.18 m) and flood of Jan. 21, 1959 a stage of 14.2 ft (4.33 m), from flood profile furnished by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1500 ft³/s (42.5 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 15	1930	2140	60.6	12.08	3.682	Mar. 22	0600	1970	55.8	11.77	3.587
Mar. 16	1030	*2840	80.4	*13.23	4.033	Apr. 20	2330	1780	50.4	11.40	3.475

Minimum daily discharge 1.3 ft³/s (0.042 m³/s) Aug. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	3.9	265	39	31	8.0	245	61	23	6.1	1.6	7.5
2	258	3.9	295	33	28	8.0	204	45	20	107	1.6	5.4
3	101	3.9	173	30	26	8.0	201	38	19	818	4.3	4.5
4	47	3.9	103	24	24	8.2	225	40	13	697	3.6	3.9
5	29	3.9	95	25	22	9.0	222	37	11	274	2.5	3.5
6	22	4.0	76	65	21	13	445	31	9.3	117	2.4	3.6
7	15	5.5	51	69	20	19	923	29	13	63	19	4.3
8	21	24	54	254	18	18	568	29	19	48	20	4.4
9	49	20	70	261	16	16	267	34	18	36	6.0	4.0
10	50	34	46	176	15	15	157	39	10	24	4.8	4.0
11	36	29	38	127	14	14	135	33	7.2	15	4.4	3.6
12	23	29	37	91	13	19	119	29	6.7	9.3	5.4	3.8
13	18	19	55	72	12	57	91	119	51	6.6	3.2	4.4
14	13	13	1120	66	11	845	65	240	35	7.7	2.1	5.2
15	9.2	11	2040	62	10	2250	53	331	19	7.4	1.9	14
16	8.2	16	2010	58	9.6	2750	43	236	12	5.5	1.7	9.8
17	7.0	26	1730	54	9.4	2560	39	182	9.1	4.3	2.2	9.4
18	6.2	19	1830	50	9.2	2170	75	128	6.7	4.0	1.9	5.9
19	5.7	19	1910	46	9.2	1530	858	86	17	2.3	1.7	5.0
20	5.2	15	1300	42	9.0	1340	1490	64	13	1.9	1.8	5.5
21	4.9	16	690	41	8.8	1640	1620	67	15	1.7	1.3	6.1
22	4.6	19	327	40	8.6	1910	1080	52	14	1.9	1.8	6.1
23	4.3	16	199	40	8.6	1610	561	52	8.4	2.0	2.3	5.7
24	4.0	13	164	39	8.4	1150	428	153	4.0	3.1	2.5	5.0
25	3.9	12	303	39	8.4	705	532	182	3.7	3.3	2.9	4.7
26	4.3	9.2	230	43	8.2	1210	553	117	3.8	2.7	3.4	4.5
27	4.9	9.1	168	54	8.2	1380	252	78	4.5	2.3	3.9	4.5
28	4.5	10	127	46	8.0	993	150	59	10	2.4	14	4.8
29	4.2	8.4	51	41	---	672	103	46	8.0	1.7	8.8	4.9
30	4.0	16	45	37	---	405	83	38	5.0	1.8	6.9	4.7
31	4.0	---	40	34	---	283	---	31	---	1.6	12	---
TOTAL	862.1	431.7	15642	2098	394.6	25615.2	11797	2706	411.0	2280.6	151.1	162.7
MEAN	27.8	14.4	505	67.7	14.1	826	393	87.3	13.7	73.6	4.87	5.42
MAX	258	34	2040	261	31	2750	1620	331	51	818	20	14
MIN	3.9	3.9	37	24	8.0	8.0	39	29	3.7	1.6	1.3	3.5

CAL YR 1977 TOTAL 31768.65 MEAN 87.0 MAX 2040 MIN .29
WTR YR 1978 TOTAL 62552.00 MEAN 171 MAX 2750 MIN 1.3

03262000 LORAMIE CREEK AT LOCKINGTON, OH

LOCATION.--Lat 40°12'35", long 84°14'32", in NE 1/4 sec. 30, T.7 N., R.6 E., Shelby County, Hydrologic Unit 05080001, on left bank at downstream side of county road bridge, 1,300 ft (396 m) downstream from Lockington Dam, 0.5 mi (0.8 km) northwest of Lockington, and at mile 1.9 (3.1 km).

DRAINAGE AREA.--257 mi² (666 km²).

PERIOD OF RECORD.--October 1915 to current year.

REVISED RECORDS.--WSP 923: 1916. WSP 1908: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 800.03 ft (243.849 m) National Geodetic Vertical Datum of 1912. Prior to July 3, 1924, nonrecording gage at same site at datum 75.96 ft (23.153 m) higher. July 3, 1924, to Aug. 17, 1926, nonrecording gage, and Aug. 18 to Sept. 30, 1926, water-stage recorder, at same site at datum 74.96 ft (22.848 m) higher.

REMARKS.--Records good, except those for winter periods, which are fair. Slight regulation by Lake Loramie 18 mi (29 km) upstream, capacity, 13,000 acre-ft (16.0 hm³). Flood flow regulated by Lockington retarding basin beginning in 1921.

COOPERATION.--Gage-height tapes and 9 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--63 years, 206 ft³/s (5.834 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft³/s (295 m³/s) May 7, 1916, gage height, 86.4 ft (26.33 m), present datum, from rating curve extended above 5,400 ft³/s (153 m³/s); minimum daily, 1.7 ft³/s (0.048 m³/s) Sept. 4, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 25, 1913 reached a stage of 91.6 ft (27.92 m), present datum, discharge, 25,600 ft³/s (725 m³/s), at site upstream from Turtle Creek, drainage area, 211 mi² (546 km²), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,900 ft³/s (110 m³/s) Mar. 17, gage height, 82.91 ft (25.271 m); minimum daily, 6.3 ft³/s (0.178 m³/s) Oct. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	7.6	380	80	70	27	354	139	56	21	13	25
2	302	8.0	431	68	66	26	279	113	47	63	13	17
3	170	7.6	254	60	64	27	254	94	45	928	27	16
4	84	7.6	173	53	62	29	296	89	43	891	28	13
5	51	7.2	139	49	61	29	294	92	36	411	19	12
6	36	7.2	130	67	57	29	738	79	32	185	15	11
7	29	9.2	71	97	53	28	1320	71	35	114	112	13
8	28	15	87	468	49	58	901	69	39	85	91	11
9	56	20	96	422	46	72	437	106	41	72	43	8.5
10	80	24	90	273	44	60	289	92	38	56	27	9.4
11	60	39	67	199	42	54	241	82	32	45	26	9.5
12	43	34	60	179	41	50	218	72	31	36	20	8.3
13	32	33	70	149	39	159	173	275	54	30	18	8.9
14	26	27	2160	123	39	2170	135	454	79	29	16	8.8
15	19	20	2960	106	36	3480	110	591	52	33	15	8.6
16	16	20	2770	89	33	3710	96	399	39	26	14	9.5
17	13	24	2670	90	32	3750	84	323	32	22	14	11
18	12	34	2850	91	31	3090	232	242	27	21	12	14
19	9.8	29	2640	92	30	2240	1340	175	29	23	11	14
20	9.3	28	1930	85	30	1860	2130	137	34	22	12	11
21	9.2	27	1090	87	29	2440	2180	126	48	18	10	9.8
22	9.2	26	532	78	29	2580	1540	113	44	17	10	8.2
23	8.4	31	310	81	29	2350	896	103	34	17	9.4	7.2
24	8.6	25	254	82	29	1640	691	179	26	21	9.0	8.5
25	6.8	21	310	93	29	1110	962	259	22	19	8.9	7.7
26	6.8	24	220	108	28	1990	980	193	21	18	8.2	7.8
27	6.5	21	180	98	26	1820	453	142	21	17	9.6	7.7
28	6.3	19	152	90	26	1390	276	111	20	16	42	7.4
29	6.6	19	122	84	---	997	209	92	21	15	38	7.4
30	7.1	20	96	78	---	604	169	78	20	14	24	7.0
31	8.0	---	86	74	---	408	---	68	---	14	26	---
TOTAL	1288.6	634.4	23380	3793	1150	38277	18277	5158	1098	3299	741.1	318.2
MEAN	41.6	21.1	754	122	41.1	1235	609	166	36.6	106	23.9	10.6
MAX	302	39	2960	468	70	3750	2180	591	79	928	112	25
MIN	6.3	7.2	68	49	26	26	84	68	20	14	8.2	7.0

CAL YR 1977 TOTAL 50098.1 MEAN 137 MAX 2960 MIN 1.7
WTR YR 1978 TOTAL 97414.3 MEAN 267 MAX 3750 MIN 6.3

03262700 GREAT MIAMI RIVER AT TROY, OH

LOCATION.--Lat 40°02'25", long 84°11'52", Miami County, Hydrologic Unit 05080001, 400 ft (122 m) downstream fro B. and O. Railroad bridge, 1,300 ft (396 m) downstream from bridge on State Highway 55 at Troy, 1.2 mi (1.9 km) upstream from small left bank tributary, 2.3 mi (3.7 km) downstream from Spring Creek, and at mile 105 (169 km).

DRAINAGE AREA.--926 mi² (2,398 km²).

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1961, 1962 (published as Miami River at Troy). October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 810.67 ft (247.092 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Flood flow regulated by retarding basin on Loramie Creek, 18 mi (29 km) upstream. Low and medium flow slightly regulated by Indian Lake; capacity, 45,900 acre-ft (56.6 hm³), 54 mi (87 km) upstream. Water supply for city of Troy is pumped from wells adjacent to the Great Miami River upstream from the station. The pumpage averaged 5.0 ft³/s (0.13 m³/s) in 1978 and is returned as sewage 1 mi (2 km) downstream from the station. Water-quality data collected at this site 1965 to 1974. Sediment data collected 1970 to 1974.

COOPERATION.--Gage-height tapes and 9 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--16 years, 776 ft³/s (21.98 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,300 ft³/s (490 m³/s) Mar. 6, 1963, gage height, 14.66 ft (4.468 m); minimum, 0.50 ft³/s (0.014 m³/s) July 12, 13, 1963, result of temporary storage during repair of dam upstream; minimum daily discharge, 4.3 ft³/s (0.122 m³/s) July 17, 1977 result of dam closure upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 11, 1958 reached a stage of 16.4 ft (5.00 m), discharge, 21,000 ft³/s (595 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,500 ft³/s (326 m³/s) Mar. 16, gage height, 11.62 ft (3.542 m); minimum daily, 54 ft³/s (1.53 m³/s) Sept. 27-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	494	109	1130	400	420	163	2140	655	375	183	88	161
2	1080	101	1810	300	400	153	1780	598	362	276	94	136
3	703	91	1240	250	380	157	1560	534	319	1310	401	111
4	403	77	848	280	360	155	1540	501	306	1450	325	104
5	280	70	746	367	350	147	1420	484	306	909	215	92
6	192	68	745	340	330	153	1780	467	263	518	152	88
7	146	127	453	404	320	161	3300	415	274	349	211	74
8	186	124	452	1120	310	235	2740	409	334	283	260	70
9	233	119	502	1670	300	235	1920	431	327	225	183	63
10	330	155	391	699	280	253	1470	478	312	203	150	60
11	341	140	384	640	260	253	1140	456	280	164	131	65
12	257	158	410	600	250	246	1020	412	270	149	127	69
13	192	159	475	550	240	521	819	920	341	150	113	79
14	178	175	5590	520	230	5830	726	1710	557	160	109	74
15	150	137	9920	480	220	10800	623	2090	426	140	106	81
16	137	124	7860	450	210	11100	567	1690	329	131	167	95
17	132	205	7190	420	200	9890	513	1340	287	120	117	102
18	173	332	7130	400	195	7890	542	1030	258	115	102	95
19	125	302	6510	380	191	6460	2370	806	378	117	88	88
20	94	271	5190	360	184	5920	4420	714	414	110	87	86
21	88	289	3730	340	190	7400	4970	648	367	105	82	83
22	96	291	2410	330	192	8530	4380	638	308	100	87	85
23	87	293	1740	320	174	7870	3040	606	274	98	90	69
24	91	278	1380	330	164	6390	2370	1230	218	130	85	69
25	98	253	2020	460	167	4700	2540	1370	195	117	82	71
26	106	240	1740	560	164	6500	2670	1030	200	105	85	59
27	99	240	1130	600	156	6070	1710	759	196	99	96	54
28	93	230	760	540	157	5280	1160	628	207	92	312	54
29	88	220	600	500	---	4460	855	569	194	81	194	54
30	85	251	520	470	---	3360	716	499	191	83	202	68
31	101	---	470	440	---	2540	---	430	---	83	236	---
TOTAL	6858	5629	75476	15520	6994	123822	56801	24547	9072	8155	4777	2459
MEAN	221	188	2435	501	250	3994	1893	792	302	263	154	82.0
MAX	1080	332	9920	1670	420	11100	4970	2090	557	1450	401	161
MIN	85	68	384	250	156	147	513	409	191	81	82	54

CAL YR 1977 TOTAL 192026.3 MEAN 526 MAX 9920 MIN 4.3
WTR YR 1978 TOTAL 340110.0 MEAN 932 MAX 11100 MIN 54

03262745 GREAT MIAMI RIVER AT TIPP CITY, OH

LOCATION.--39°58'02", long 84°10'03", Miami County, Hydrologic Unit 05090001, on right bank at bridge on Tipp-Elizabeth Road, 0.04 mi (0.06 km) upstream from Millers Ditch at Tipp City and at mile 99.00 (159.29 km).

DRAINAGE AREA.--970 mi² (2,512 km²).

PERIOD OF RECORD.--July 1978 to September 1978.

PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: July 1978 to September 1978.
pH: July 1978 to September 1978.
WATER TEMPERATURES: July 1978 to September 1978.
DISSOLVED OXYGEN: July 1978 to September 1978.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. No discharge records available.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 828 micromhos Sept. 14, 1978; minimum recorded, 494 micromhos Aug. 4, 1978.
pH: Maximum recorded 9.0 units July 13, 15, 1978; minimum recorded, 7.2 units Aug. 4, 1978.
WATER TEMPERATURES: Maximum recorded, 30.0°C July 1978; minimum recorded, 15.5°C Sept. 29, 1978.
DISSOLVED OXYGEN: Maximum recorded 18.5 mg/L Aug. 24, 1978; minimum recorded, 1.4 mg/L July 24, 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 828 micromhos Sept. 14; minimum recorded, 494 micromhos Aug. 4.
pH: Maximum recorded, 9.0 units July 13, 15, 1978; minimum recorded, 7.2 units Aug. 4.
WATER TEMPERATURES: Maximum recorded, 30.0°C July 22, minimum recorded, 15.5°C Sept. 29.
DISSOLVED OXYGEN: Maximum recorded, 18.5 mg/L Aug. 24; minimum recorded, 1.4 mg/L July 24.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C). WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1					---	---	660	626	694	658	724	696
2					---	---	642	572	702	602	740	726
3					---	---	642	502	636	508	738	712
4					---	---	572	512	640	494	736	718
5					---	---	636	574	674	622	748	736
6					---	---	658	638	702	680	754	732
7					---	---	704	670	704	696	764	744
8					---	---	712	700	708	686	778	760
9					---	---	712	682	702	600	802	780
10					---	---	704	592	684	596	806	774
11					---	---	654	544	686	664	792	768
12					---	---	616	538	714	682	812	788
13					---	---	606	558	734	714	822	808
14					---	---	646	592	744	722	828	812
15					---	---	676	628	738	692	826	810
16					---	---	672	630	734	574	824	788
17					---	---	666	620	660	610	792	766
18					---	---	638	594	692	620	786	762
19					---	---	632	600	740	698	772	750
20					---	---	658	618	754	744	764	744
21					---	---	662	640	752	732	774	748
22					---	---	682	638	754	728	768	752
23					---	---	686	634	736	716	782	770
24					---	---	700	658	740	694	786	762
25					---	---	694	632	740	710	774	760
26					---	---	734	684	750	640	780	766
27					---	---	742	698	736	628	804	782
28					---	---	708	646	724	534	800	788
29					636	608	706	660	642	590	812	796
30					656	614	710	682	678	594	824	806
31					---	---	708	662	692	685	---	---
MONTH					656	608	742	502	754	494	828	696
YEAR	828	494										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03262745 GREAT MIAMI RIVER AT TIPP CITY, OH--Continued

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1												
2							---	---	8.4	7.6	8.1	7.7
3							---	---	8.1	7.8	8.2	7.8
4							---	---	8.0	7.3	8.5	7.9
5							---	---	7.6	7.2	8.5	8.1
6							---	---	7.6	7.4	8.5	8.1
7							---	---	7.5	7.4	8.6	8.1
8							---	---	8.1	7.4	8.7	8.2
9							---	---	8.2	7.8	8.7	8.4
10							---	---	8.1	7.6	8.6	8.4
11							---	---	8.1	7.5	8.7	8.3
12							---	---	8.2	7.6	8.7	8.4
13							---	---	8.3	7.7	8.4	8.0
14							9.0	8.6	8.5	7.8	8.2	7.9
15							8.9	8.0	8.6	8.1	7.9	7.8
16							9.0	8.5	8.7	8.1	8.3	7.8
17							8.7	8.2	8.5	7.9	8.4	8.0
18							8.5	8.0	8.5	7.8	8.3	7.9
19							8.3	7.6	8.3	7.9	8.2	7.8
20							8.4	7.7	8.2	7.8	8.2	7.9
21							8.4	7.9	8.0	7.8	8.5	8.1
22							8.2	7.8	8.1	7.7	8.6	8.1
23							8.2	7.8	8.0	7.6	8.5	8.2
24							8.1	7.7	8.4	7.7	8.4	8.1
25							7.9	7.6	8.8	8.1	8.2	7.9
26							7.7	7.5	8.8	8.3	8.3	7.9
27							8.0	7.6	8.6	8.2	8.4	8.1
28							8.5	7.7	8.2	7.7	8.6	8.1
29							8.9	8.2	7.9	7.7	8.5	8.2
30							8.8	8.3	8.4	7.7	8.3	8.0
31							8.4	8.0	8.1	7.7	8.1	7.9
MONTH							8.4	7.6	7.9	7.6	---	---
YEAR	9.0	7.2					9.0	7.5	8.8	7.2	8.7	7.7

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1												
2					---	---	28.0	25.5	26.5	23.0	23.0	19.5
3					---	---	25.5	24.5	27.0	25.0	23.5	19.5
4					---	---	24.5	22.0	26.0	24.0	23.5	20.0
5					---	---	22.5	21.5	25.5	23.0	23.5	20.5
6					---	---	23.0	21.5	24.0	23.0	23.5	20.0
7					---	---	24.5	21.5	23.5	23.0	24.5	21.0
8					---	---	26.0	23.5	24.5	23.0	25.0	21.5
9					---	---	27.0	24.5	25.5	23.0	25.5	22.0
10					---	---	27.0	24.0	26.5	23.0	26.0	22.5
11					---	---	26.5	25.0	27.0	24.0	26.0	23.0
12					---	---	26.0	22.5	25.5	23.5	25.5	23.0
13					---	---	25.5	22.0	25.5	23.5	24.0	23.0
14					---	---	25.5	22.5	26.5	23.5	25.0	22.5
15					---	---	27.0	23.5	26.5	24.0	24.0	23.0
16					---	---	27.0	24.5	27.5	24.0	24.5	21.0
17					---	---	27.0	24.0	27.0	25.0	23.5	22.0
18					---	---	27.0	23.0	26.5	23.0	24.0	22.5
19					---	---	27.0	23.5	26.0	23.5	25.5	23.0
20					---	---	28.0	24.0	26.5	24.0	26.0	23.5
21					---	---	29.0	25.5	25.5	22.0	26.5	24.0
22					---	---	29.5	26.5	24.5	21.0	27.0	24.0
23					---	---	30.0	27.0	25.0	21.0	24.0	21.0
24					---	---	29.5	27.5	26.0	21.5	22.0	18.5
25					---	---	27.5	25.5	26.5	23.0	22.0	19.0
26					---	---	26.5	24.5	27.5	24.0	21.5	18.5
27					---	---	28.5	25.0	26.5	24.0	20.0	17.0
28					---	---	27.5	25.5	26.5	23.5	20.5	16.5
29					---	---	28.0	24.5	25.5	23.5	20.0	17.0
30					29.5	27.0	26.5	24.5	25.0	23.5	19.0	15.5
31					29.5	26.0	25.5	24.0	24.5	21.0	17.5	16.0
MONTH					---	---	25.5	23.0	22.5	20.0	---	---
YEAR	30.0	15.5			29.5	26.0	30.0	21.5	27.5	20.0	27.0	15.5

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03262745 GREAT MIAMI RIVER AT TIPP CITY, OH--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1					---	---	14.0	4.5	12.6	3.9	9.5	6.8
2					---	---	11.0	4.6	11.6	3.0	11.2	6.7
3					---	---	7.4	5.5	4.6	2.8	13.3	6.8
4					---	---	7.5	7.0	6.1	3.0	14.3	7.3
5					---	---	7.8	7.4	7.3	3.9	13.4	7.3
6					---	---	8.1	7.2	5.3	3.2	16.2	7.3
7					---	---	8.5	6.8	7.6	3.3	17.0	7.4
8					---	---	10.2	6.6	9.5	5.1	17.4	7.7
9					---	---	14.5	6.6	9.1	4.8	14.4	7.6
10					---	---	17.3	7.0	10.0	4.1	16.3	6.9
11					---	---	18.3	7.8	11.2	5.5	15.1	6.8
12					---	---	17.7	7.9	11.8	5.4	9.7	6.2
13					---	---	17.3	6.9	13.4	5.7	10.1	5.8
14					---	---	17.1	6.5	14.1	6.2	7.8	5.3
15					---	---	15.9	6.5	15.0	5.7	10.6	5.9
16					---	---	14.5	4.9	10.2	5.3	12.2	6.1
17					---	---	13.9	4.9	12.7	5.7	11.8	6.2
18					---	---	13.0	4.5	8.8	5.5	11.5	6.2
19					---	---	13.3	4.3	9.6	5.2	11.3	6.0
20					---	---	12.3	3.4	9.6	4.9	13.3	6.1
21					---	---	11.4	2.5	9.2	4.9	14.9	5.8
22					---	---	10.5	1.9	9.2	4.5	12.7	6.1
23					---	---	7.4	1.5	12.8	5.6	12.0	7.1
24					---	---	5.9	1.4	18.5	6.7	10.6	7.0
25					---	---	5.8	3.4	16.5	6.4	10.8	7.0
26					---	---	8.9	3.6	14.5	6.4	12.6	7.6
27					---	---	13.2	4.1	10.5	4.8	13.6	7.8
28					---	---	16.8	5.4	7.0	5.3	13.5	7.8
29					15.7	6.7	15.1	4.6	10.6	5.6	11.8	8.1
30					15.6	4.8	10.3	3.5	7.9	6.2	10.0	7.4
31					---	---	12.8	3.6	8.4	6.9	---	---
MONTH					15.7	4.8	18.3	1.4	18.5	2.8	17.4	5.3
YEAR	18.5	1.4										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03263000 GREAT MIAMI RIVER AT TAYLORSVILLE, OH

LOCATION.--Lat 39°52'22", long 84°09'51", in SW 1/4 sec. 36, R.8, T.2, Montgomery County, Hydrologic Unit 05080001, on left bank 600 ft (183 m) downstream from Taylorsville Dam, 0.8 mi (1.3 km) north of Taylorsville, 2.1 mi (3.4 km) east of Vandalia, 9.5 mi (15.3 km) upstream from Stillwater River, and at mile 90.8 (146.1 km).

DRAINAGE AREA.--1,149 mi² (2,976 km²).

PERIOD OF RECORD.--January 1914 to September 1917 (published as Miami River at Tadmor), October 1921 to current year (published as Miami River at Taylorsville 1921-62). Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at site at Tadmor, January 1914 to July 1920, are contained in reports of the National Weather Srvice.

REVISED RECORDS.--WSP 743: 1924(M). WSP 853: 1930, 1937. WSP 923: 1922-24. WSP 1385: 1916. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 700.08 ft (213.384 m) National Geodetic Vertical Datum of 1912. Prior to October 1921, nonrecording gage at site 1.8 mi (2.9 km) upstream at different datum. Jan. 1, 1922, to Nov. 11, 1925, nonrecording gage at site 600 ft (183 m) upstream at outlet works of Taylorsville Dam at present datum.

REMARKS.--Records good, except those for winter periods, which are fair. Flood flow regulated by retarding basins on Great Miami River, just upstream from station and on Loramie Creek 28 mi (45 km) upstream from station beginning in 1921. Low and medium flow slightly regulated by Indian Lake 64 mi (103 km) upstream from station, and by Lake Loramie 47 mi (76 km) upstream from station on Loramie Creek; combined capacity, 58,900 acre-ft (72.6 hm³).

COOPERATION.--Gage-height tapes and 10 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--60 years, 988 ft³/s (27.98 m³/s), 11.68 in/yr (297 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,400 ft³/s (889 m³/s) Jan. 22, 1959, gage height, 75.44 ft (22.994 m); minimum daily, 25 ft³/s (0.71 m³/s) July 18, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 25.4 ft (7.74 m) at site at Tadmor, discharge, 127,000 ft³/s (3,600 m³/s) computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,900 ft³/s (422 m³/s) Mar. 15 gage height, 71.77 ft (21.875 m); minimum daily, 79 ft³/s (2.24 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	500	134	897	580	780	260	2640	960	516	219	112	537
2	1900	127	2020	490	740	260	2200	860	508	561	115	350
3	800	117	1440	420	700	250	1900	771	439	1410	2020	254
4	450	105	1000	390	660	250	1840	699	410	1750	1020	213
5	340	84	947	523	620	240	1720	710	411	1230	484	185
6	247	80	1000	488	600	240	1870	656	355	714	326	177
7	186	110	670	531	580	250	3690	581	412	485	282	168
8	212	166	518	1180	560	270	3400	572	442	381	392	150
9	260	141	735	2190	540	290	2440	570	411	323	294	140
10	306	174	660	3470	520	320	1880	608	363	284	247	127
11	377	174	600	2000	500	370	1540	600	338	255	214	127
12	303	174	680	1300	480	420	1380	555	322	216	273	113
13	237	194	791	1400	460	767	1170	933	390	211	211	125
14	209	191	5190	1100	440	6250	998	1940	526	245	188	122
15	191	197	11200	920	430	14000	870	2500	511	215	189	124
16	164	169	9930	780	420	14300	771	2110	374	200	259	141
17	156	186	8290	680	410	12900	702	1760	316	184	319	167
18	186	341	7750	600	400	10400	748	1400	309	174	231	156
19	172	333	7860	540	390	8430	2180	1120	786	174	194	144
20	127	292	6150	500	370	7510	4460	979	645	165	167	136
21	103	341	4350	470	360	8230	5770	898	503	148	152	114
22	112	321	2890	450	340	10200	5110	840	426	148	149	116
23	103	321	2090	420	330	9060	3620	836	345	150	153	97
24	103	303	1690	400	320	7720	2900	1940	302	191	144	92
25	108	277	2370	480	310	5790	3000	2000	257	204	136	93
26	138	274	2200	1000	300	7700	3640	1520	261	169	131	104
27	122	263	1580	1100	280	7680	2380	1140	243	140	170	89
28	112	263	1000	1000	270	6760	1660	914	270	146	389	85
29	105	253	900	920	---	5310	1280	781	228	133	401	82
30	101	299	800	860	---	4000	1080	694	216	129	359	79
31	108	---	700	920	---	3120	---	600	---	128	1000	---
TOTAL	8538	6404	88898	28002	13110	153547	68839	33047	11835	11083	10721	4607
MEAN	275	213	2868	903	468	4953	2295	1066	395	358	346	154
MAX	1900	341	11200	3470	780	14300	5770	2500	786	1750	2020	537
MIN	101	80	518	390	270	240	702	555	216	128	112	79
CFSM	.24	.19	2.50	.79	.41	4.31	2.00	.93	.34	.31	.30	.13
IN.	.28	.21	2.88	.91	.42	4.97	2.23	1.07	.38	.36	.35	.15

CAL YR 1977 TOTAL 232768 MEAN 638 MAX 11200 MIN 25 CFSM .56 IN 7.54
WTR YR 1978 TOTAL 438631 MEAN 1202 MAX 14300 MIN 79 CFSM 1.05 IN 14.20

03264000 GREENVILLE CREEK NEAR BRADFORD, OH

LOCATION (revised).--Lat 40°06'08", long 84°25'48", in SW 1/4 NW 1/4 sec. 34, T.9 N., R.4 E., Miami County, Hydrologic Unit 05080001, on left bank at downstream side of bridge on State Highway 721, 0.8 mi (1.3 km) downstream from small left bank tributary, 1.8 mi (2.9 km) south of Bradford, and 6 mi (10 km) upstream from mouth.

DRAINAGE AREA.--193 mi² (500 km²).

PERIOD OF RECORD.--October 1930 to current year. Prior to April 1931, monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 803: 1933(M). WSP 1235: 1936, 1937(M). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 948.9 ft (289.22 m) National Geodetic Vertical Datum of 1912. Prior to Oct. 1, 1942, nonrecording gage at same site and datum. Apr. 6, 1962 to Nov. 13, 1963, water-stage recorder at site 200 ft (61 m) downstream at same datum.

REMARKS.--Records fair prior to Mar. 31 and good thereafter. Some diurnal fluctuation caused by mill 8 mi (13 km) upstream from station; daily flows are not affected appreciably. Sediment data collected at this site 1970 to 1974.

COOPERATION.--Gage-height tapes and 10 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--48 years, 169 ft³/s (4.786 m³/s), 11.89 in/yr (302 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,320 ft³/s (264 m³/s) May 14, 1933, gage height, 9.2 ft (2.80 m); maximum gage height, 10.31 ft (3.142 m) Mar. 5, 1963, from high-water mark in well (ice jam); minimum discharge, 4.8 ft³/s (0.14 m³/s) Sept. 17, 1963.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 12.1 ft (3.69 m), discharge, 18,200 ft³/s (515 m³/s), at site with drainage area of 213 mi² (552 km²), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42.5 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 15	1600	2840	69.1	6.53	1.990	Mar. 22	---	1700	48.1	---	---
Dec. 19	0430	2150	60.9	6.13	1.868	Mar. 26	---	1700	48.1	---	---
Mar. 15-16	unknown	*3960	112	*8.32	2.536	Apr. 26	---	1500	42.5	---	---

Minimum daily, 27 ft³/s (0.76 m³/s) Aug. 26, Sept. 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	407	37	364	110	76	54	340	218	133	49	37	291
2	460	38	407	100	74	54	291	185	120	120	35	163
3	194	44	250	96	74	54	252	165	112	398	123	111
4	104	37	190	100	72	54	235	155	105	222	138	85
5	70	37	170	94	72	52	221	170	93	127	68	73
6	56	36	160	80	72	52	258	158	86	100	54	63
7	46	66	114	94	70	52	600	146	104	82	57	52
8	63	96	170	250	70	52	440	132	115	138	50	49
9	116	83	158	230	70	52	320	130	97	97	45	46
10	128	76	141	210	68	60	264	130	86	75	44	42
11	84	84	130	190	68	84	238	123	77	68	46	40
12	62	71	130	160	66	140	235	125	87	59	44	38
13	51	60	141	140	66	300	232	288	106	58	39	37
14	45	54	1410	120	66	1100	224	396	81	62	36	37
15	42	50	2350	110	64	2300	192	425	72	60	35	36
16	40	61	1760	100	64	1700	175	337	67	51	53	45
17	42	73	1210	94	62	1300	148	304	65	46	70	56
18	38	82	1850	90	62	1000	155	258	65	44	50	44
19	35	74	1890	86	62	860	914	221	201	40	39	38
20	35	68	934	82	60	940	920	195	145	39	35	34
21	35	80	603	78	60	1200	668	204	102	38	32	34
22	34	73	399	76	60	1300	374	181	90	37	30	34
23	31	72	305	76	58	960	326	235	76	35	29	32
24	31	67	267	78	58	800	595	771	66	58	29	32
25	30	61	392	84	58	680	855	562	61	59	29	30
26	46	59	273	88	56	1400	1290	347	69	52	27	29
27	43	56	230	86	56	880	749	261	67	45	31	29
28	44	51	180	84	56	640	404	220	60	38	782	27
29	48	45	160	82	---	500	333	190	53	36	649	27
30	42	60	140	80	---	424	276	171	48	34	320	27
31	36	---	120	78	---	381	---	148	---	34	583	---
TOTAL	2538	1851	16998	3434	1820	19425	12524	7551	2709	2393	3559	1681
MEAN	81.9	61.7	548	111	65.0	627	417	244	90.3	77.2	115	56.0
MAX	460	96	2350	250	76	2300	1290	771	201	398	782	291
MIN	30	36	114	76	56	52	148	123	48	34	27	27
CFSM	.42	.32	2.84	.58	.34	3.25	2.16	1.26	.47	.40	.60	.29
IN.	.49	.36	3.28	.66	.35	3.74	2.41	1.46	.52	.46	.69	.32

CAL YR 1977 TOTAL 42002 MEAN 115 MAX 2350 MIN 11 CFSM .60 IN 8.10
WTR YR 1978 TOTAL 76483 MEAN 210 MAX 2350 MIN 27 CFSM 1.09 IN 14.74

03265000 STILLWATER RIVER AT PLEASANT HILL, OH

LOCATION.--Lat 40°03'28", long 84°21'22", in SW 1/4 sec. 18, T.7 N., R.5 E., Miami County, Hydrologic Unit 05080001, on left bank at downstream side of bridge on Laurer Road, 0.8 mi (1.3 km) northwest of Pleasant Hill, 2 mi (3 km) downstream from Painter Creek, 2 mi (3 km) upstream from Canyon Run, and at mile 28.35 (45.62 km).

DRAINAGE AREA.--503 mi² (1,303 km²).

PERIOD OF RECORD.--October 1916 to September 1928, October 1934 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at same site March 1922 to December 1963 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 523: 1917. WSP 1305: 1920(M). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 846.73 ft (258.083 m) National Geodetic Vertical Datum of 1912. Prior to Dec. 23, 1934, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Sediment data collected at this site 1963 to 1975.

COOPERATION.--Gage-height tapes and 7 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--56 years, 435 ft³/s (12.32 m³/s), 11.74 in/yr (298 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,400 ft³/s (748 m³/s) Jan. 14, 1937, from rating curve extended above 18,500 ft³/s (396 m³/s) on basis of velocity-area study; maximum gage height, 17.98 ft (5.480 m) Jan. 21, 1959; minimum discharge observed, 4 ft³/s (0.11 m³/s) Oct. 17, 1920, July 12, 22, Aug. 30, 1921.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 25, 1913 reached a stage of 17.5 ft (5.33 m). Discharge, at site about 3 mi (5 km) upstream, 51,400 ft³/s (1,460 m³/s), computed by Miami Conservancy District. This stage is not comparable with present gage heights because of failure of levee in 1913.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 5,000 ft³/s (142 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 15	0530	7100	201	10.80	3.292	Mar. 22	0230	5640	160	9.38	2.859
Dec. 18	2300	7090	201	10.79	3.289	Mar. 26	1030	5880	167	9.62	2.932
Mar. 14	2400	*11200	317	*13.76	4.194	Apr. 26	0130	5070	144	8.77	2.673

Minimum discharge 29 ft³/s (0.82 m) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	593	57	516	200	160	94	810	467	233	100	53	472
2	933	56	756	170	160	94	662	380	212	162	55	264
3	373	60	434	140	160	92	547	333	199	989	162	178
4	190	59	321	120	130	92	525	318	183	689	194	135
5	123	56	265	160	150	90	492	323	171	338	118	112
6	96	54	285	150	140	90	700	277	159	222	86	101
7	82	71	169	160	140	90	1980	244	183	177	116	86
8	86	107	201	537	140	90	1020	244	202	189	100	78
9	139	109	212	577	130	90	694	272	177	174	80	74
10	165	106	172	253	130	100	587	251	154	135	75	65
11	139	90	157	310	130	120	530	222	140	118	75	61
12	105	106	166	270	130	160	480	216	143	104	94	59
13	87	90	168	250	120	426	391	505	205	98	76	59
14	75	81	4010	220	120	5970	313	852	177	104	63	58
15	69	74	6750	180	120	9910	281	957	143	104	59	58
16	63	81	4760	160	120	8810	259	740	133	90	71	66
17	64	98	3870	150	110	6180	244	683	123	80	102	85
18	58	110	5720	140	110	3540	313	569	123	76	84	76
19	55	106	5760	140	110	2470	2230	443	259	69	64	65
20	55	100	2570	140	110	2890	3170	380	255	64	56	57
21	54	104	1460	130	110	4380	2000	380	186	63	50	58
22	54	106	864	120	110	4840	1050	328	189	58	48	58
23	52	104	629	120	100	3370	774	385	159	59	48	52
24	50	102	543	130	100	2550	1360	1510	133	73	45	52
25	48	94	953	150	100	1810	2970	1220	118	82	43	47
26	55	88	623	190	100	5330	3950	728	123	80	41	45
27	66	85	464	180	98	3410	1520	541	125	71	59	45
28	61	81	400	190	95	1950	894	425	130	61	652	43
29	67	74	364	180	---	1520	663	359	104	53	891	41
30	66	83	281	170	---	1070	564	313	94	52	456	43
31	58	---	230	170	---	870	---	268	---	50	651	---
TOTAL	4181	2592	44113	6157	3454	72504	32023	15133	4935	4784	4772	2693
MEAN	135	86.4	1423	199	123	2339	1067	488	165	154	154	89.8
MAX	933	110	6750	577	160	9910	3950	1510	259	989	891	472
MIN	48	54	157	120	96	90	244	216	94	50	41	41
CFSM	.27	.17	2.83	.40	.25	4.65	2.12	.97	.33	.31	.31	.18
IN.	.31	.19	3.26	.46	.26	5.36	2.37	1.12	.36	.35	.35	.20

CAL YR 1977 TOTAL 94077.3 MEAN 258 MAX 6750 MIN 9.6 CFSM .51 IN 6.96
WTR YR 1978 TOTAL 197341.0 MEAN 541 MAX 9910 MIN 41 CFSM 1.08 IN 14.59

03266000 STILLWATER RIVER AT ENGLEWOOD, OH

LOCATION.--Lat 39°52'10", long 84°16'57", in NW 1/4 sec. 23, T.5 N., R.5 E., Montgomery County, Hydrologic Unit 05080001, on right bank 1,000 ft (305 m) downstream from Englewood Dam, 1 mi (2 km) southeast of Englewood, and at mile 8.9 (14.3 km).

DRAINAGE AREA.--650 mi² (1,684 km²).

PERIOD OF RECORD.--October 1925 to current year (monthly discharge only, October 1925, published in WSP 1305).

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 699.97 ft (213.351 m) National Geodetic Vertical Datum of 1912.

REMARKS.--Records good except those for winter periods, which are fair. Flood flow regulated by Englewood retarding basin.

COOPERATION.--Gage-height tapes and 9 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--53 years, 566 ft³/s (16.03 m³/s), 11.82 in/yr (300 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,980 ft³/s (283 m³/s) June 15, 1958, gage height, 80.88 ft (24.652 m); minimum, 3.7 ft³/s (0.10 m³/s) Sept. 30, Oct. 1, 1944, gage height, 71.36 ft (21.751 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a discharge of 85,400 ft³/s (2,420 m³/s) at site 1 mi (2 km) downstream, computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,630 ft³/s (216 m³/s) Mar. 17, gage height, 79.33 ft (24.180 m); minimum, 27 ft³/s (0.76 m³/s) Oct. 1, gage height, 71.77 ft (21.875 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	57	256	356	350	150	1320	635	340	138	70	887
2	1310	53	1070	317	330	140	1090	538	311	172	73	515
3	710	52	700	284	310	140	845	466	287	684	403	321
4	316	52	456	241	300	140	788	436	265	1170	283	233
5	200	53	443	276	280	140	731	438	253	520	233	183
6	156	51	451	259	270	140	758	400	236	334	157	157
7	117	60	312	264	260	140	2240	348	251	261	139	141
8	122	68	238	554	260	140	1800	329	276	223	160	121
9	128	101	304	1110	250	140	1100	346	261	242	134	110
10	164	116	256	405	240	150	879	344	229	207	113	102
11	179	99	237	433	230	170	788	309	206	172	100	93
12	150	97	217	473	220	215	706	295	199	153	123	87
13	119	96	268	422	210	413	606	469	227	148	142	84
14	100	83	2290	379	210	3110	483	1110	246	142	113	89
15	87	79	5160	331	200	6000	411	1330	211	147	115	86
16	78	79	5790	295	200	7190	375	1180	187	150	126	89
17	66	86	5500	255	190	7560	351	1020	175	122	176	96
18	68	91	5250	234	190	7340	404	864	185	107	162	116
19	65	100	5910	231	190	6740	1910	650	271	100	130	106
20	59	98	5620	236	180	5940	2750	542	379	92	101	90
21	56	116	4190	220	180	5490	3270	520	297	83	85	81
22	57	109	1770	220	170	5680	1690	475	243	80	77	76
23	55	106	1110	210	170	5480	1060	468	240	81	72	76
24	53	103	908	205	170	4880	1420	1570	205	97	68	72
25	55	98	1450	254	160	3660	2400	2150	180	110	66	69
26	62	90	1280	486	160	4130	4210	1150	180	113	63	66
27	55	86	752	500	150	5010	3630	774	175	103	63	63
28	58	83	519	509	150	4380	1590	600	193	91	220	62
29	57	78	518	454	---	2980	994	509	180	81	1300	61
30	57	99	474	396	---	1860	776	447	150	77	840	62
31	59	---	408	370	---	1480	---	389	---	73	1040	---
TOTAL	4930	2539	54107	11179	6180	91128	41375	21101	7038	6273	6947	4394
MEAN	159	84.6	1745	361	221	2940	1379	681	235	202	224	146
MAX	1310	116	5910	1110	350	7560	4210	2150	379	1170	1300	887
MIN	53	51	217	205	150	140	351	295	150	73	63	61
CFSM	.25	.13	2.69	.56	.34	4.52	2.12	1.05	.36	.31	.35	.23
IN.	.28	.15	3.10	.64	.35	5.22	2.37	1.21	.40	.36	.40	.25

CAL YR 1977 TOTAL 120212 MEAN 329 MAX 5910 MIN 14 CFSM .51 IN 6.88
WTR YR 1978 TOTAL 257191 MEAN 705 MAX 7560 MIN 51 CFSM 1.09 IN 14.72

03266500 MAD RIVER AT ZANESFIELD, OH

LOCATION.--Lat 40°21'01", long 83°40'28", Logan County, Hydrologic Unit 05080001, on left bank at upstream side of bridge on County Road No. 5 (adjacent to former U.S. Highway 33), 0.8 mi (1.3 km) upstream from Sugar Creek, 1 mi (2 km) north of Zanesfield, and at mile 61.45 (98.87 km).

DRAINAGE AREA.--7.31 mi² (18.9 km²).

PERIOD OF RECORD.--August 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,208.28 ft (368.284 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period, which are fair. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--32 years, 7.73 ft³/s (0.219 m³/s), 14.36 in/yr (365 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,100 ft³/s (59.5 m³/s) Apr. 13, 1972, gage height, 9.54 ft (2.908 m) in gage house, from rating curve extended above 220 ft³/s (6.23 m³/s) on basis of critical-depth measurement of peak flow; minimum, 0.30 ft³/s (0.008 m³/s) Jan. 16, 1966, gage height, 0.58 ft (0.177 m), result of freezeup.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 230 ft³/s (6.51 m³/s) Dec. 14, gage height, 2.38 ft (0.725), above base of 200 ft³/s (5.66 m³/s); minimum 1.0 ft³/s (0.028 m³/s) Sept. 25, 27, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.9	1.5	19	5.4	9.0	3.4	18	10	6.3	3.0	1.7	1.6
2	2.3	1.5	7.8	4.7	8.4	3.4	18	9.4	5.8	4.2	1.8	1.5
3	1.8	1.5	5.1	4.2	7.8	3.4	23	8.8	5.4	4.5	4.5	1.5
4	1.5	1.9	3.8	4.1	7.4	3.3	19	9.7	5.0	3.4	2.1	1.4
5	1.4	1.8	3.8	4.2	7.0	3.3	17	11	4.7	3.0	1.9	1.4
6	1.8	1.8	3.3	4.3	6.8	3.3	37	9.2	4.4	2.8	1.9	1.4
7	1.5	2.9	2.8	6.4	6.4	3.2	34	8.5	6.6	2.5	2.0	1.3
8	2.8	2.4	2.8	35	6.0	3.2	22	8.5	5.7	2.4	1.8	1.3
9	2.6	2.0	2.8	20	5.7	3.2	18	8.4	4.6	2.3	1.8	1.3
10	1.9	1.9	3.8	13	5.4	3.2	16	7.5	4.2	2.3	2.3	1.3
11	1.7	1.8	5.3	10	5.0	3.6	17	7.0	3.9	2.2	1.8	1.3
12	1.6	1.7	4.1	7.8	4.8	7.0	15	7.8	6.6	2.1	1.8	1.4
13	1.5	1.6	4.4	7.0	4.7	13	13	17	6.0	2.2	1.7	1.4
14	1.5	1.6	152	6.4	4.6	139	12	24	4.5	2.1	1.7	1.4
15	1.5	1.6	59	5.6	4.6	81	11	19	4.0	2.1	1.8	1.5
16	1.6	2.2	35	5.1	4.6	55	11	17	3.7	2.0	1.7	1.5
17	1.4	4.7	31	4.7	4.5	35	9.7	14	3.6	2.0	1.6	1.5
18	1.4	2.6	33	4.5	4.4	24	17	14	3.9	1.9	1.6	1.3
19	1.5	2.1	21	4.3	4.3	30	26	11	5.2	1.8	1.6	1.3
20	1.5	2.1	18	4.1	4.2	45	52	11	3.7	1.7	1.5	1.2
21	1.4	2.4	14	4.0	4.0	110	39	11	3.5	1.7	1.5	1.3
22	1.4	2.1	11	3.8	3.9	59	24	9.3	3.2	1.7	1.4	1.2
23	1.4	2.1	9.2	3.7	3.8	45	20	11	3.0	3.2	1.4	1.2
24	1.4	1.9	12	3.7	3.7	30	18	42	2.9	2.6	1.4	1.2
25	1.4	2.0	22	10	3.6	30	18	20	2.8	2.1	1.4	1.1
26	1.6	1.9	15	13	3.5	67	17	14	2.9	2.0	1.4	1.1
27	1.5	1.7	7.4	15	3.5	57	14	12	2.9	1.9	1.5	1.1
28	1.5	1.8	6.4	13	3.4	33	13	9.7	2.8	1.9	2.0	1.1
29	1.4	1.8	5.8	11	---	26	12	8.5	2.6	1.8	1.6	1.1
30	1.4	5.1	5.5	10	---	21	11	7.8	2.6	1.9	1.9	1.2
31	1.5	---	5.2	9.5	---	19	---	7.0	---	1.8	1.8	---
TOTAL	54.6	64.0	531.3	257.5	145.0	962.5	591.7	385.1	127.0	73.1	55.9	39.4
MEAN	1.76	2.13	17.1	8.31	5.18	31.0	19.7	12.4	4.23	2.36	1.80	1.31
MAX	5.9	5.1	152	35	9.0	139	52	42	6.6	4.5	4.5	1.6
MIN	1.4	1.5	2.8	3.7	3.4	3.2	9.7	7.0	2.6	1.7	1.4	1.1
CFSM	.24	.29	2.34	1.14	.71	4.24	2.70	1.70	.58	.32	.25	.18
IN.	.28	.33	2.70	1.31	.74	4.90	3.01	1.96	.65	.37	.28	.20

CAL YR 1977 TOTAL 1726.34 MEAN 4.73 MAX 152 MIN .70 CFSM .65 IN 8.78
WTR YR 1978 TOTAL 3287.10 MEAN 9.01 MAX 152 MIN 1.1 CFSM 1.23 IN 16.73

03267000 MAD RIVER NEAR URBANA, OH

LOCATION.--Lat 40°06'27", long 83°47'57", on west line of sec. 35, T.5 N., R.11 W., Champaign County, Hydrologic Unit 05080001, on left bank at downstream side of bridge on U.S. Highway 36, 1.8 mi (2.9 km) upstream from Dugan Run, 1.8 mi (2.9 km) downstream from Muddy Creek, 2.5 mi (4.0 km) west of Urbana, and at mile 39.7 (63.9 km).

DRAINAGE AREA.--162 mi² (420 km²).

PERIOD OF RECORD.--September 1925 to September 1931, August 1939 to current year.

REVISED RECORDS.--WSP 1305: 1930(M). WSP 1505: 1956. WSP 1625: 1929. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 985.22 ft (300.295 m) National Geodetic Vertical Datum of 1929. Prior to May 18, 1930, nonrecording gage at same site and datum. May 18, 1930, to Sept. 30, 1931, nonrecording gage at site 600 ft (183 m) downstream at datum 0.36 ft (0.110 m) lower. Aug. 1 to Sept. 25, 1939, nonrecording gage at present site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Sediment data collected at this site 1970 to 1974.

COOPERATION.--Gage-height tapes and 8 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--45 years, 141 ft3/s (3.993 m³/s), 11.82 in/yr (300 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,000 ft³/s (227 m³/s) Jan. 22, 1959, gage height, 12.05 ft (3.673 m), from rating curve extended above 4,000 ft³/s (113 m³/s) on basis of estimate of peak flow based on contracted-opening measurement at site 3 mi (5 km) downstream with drainage area of 235 mi² (609 km²) adjusted to gage site by 0.8 power of the drainage-area ratio; minimum, 2.1 ft³/s (0.059 m³/s) Jan. 21, 1963, gage height, 2.33 ft (0.710 m), result of freezeup; minimum daily, 24 ft³/s (0.68 m³/s) Feb. 2, 3, 1945, Jan. 13, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,400 ft³/s (39.6 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 14	unknown	1830	51.8	5.98	1.823	Mar. 21	1730	1510	42.8	5.57	1.698
Mar. 14	2100	1540	43.6	5.61	1.710	May 24	0400	*2110	59.8	*6.32	1.926

Minimum discharge 37 ft³/s (1.05 m³/s) Oct. 1, gage height 2.77 ft (0.844 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	247	56	207	138	150	94	354	186	189	128	98	94
2	181	56	143	132	150	92	317	180	184	139	101	90
3	110	56	111	124	140	93	326	176	176	211	160	89
4	91	57	100	121	140	91	309	176	171	161	123	87
5	83	55	200	121	130	90	284	182	168	143	113	85
6	80	56	170	119	130	90	351	172	162	137	111	85
7	76	60	150	119	130	89	480	168	179	132	112	83
8	83	59	140	277	130	89	333	169	185	128	108	81
9	94	57	130	166	120	89	293	168	168	126	106	81
10	87	57	120	140	120	90	277	161	160	123	107	80
11	81	55	130	130	120	91	270	156	155	120	104	79
12	77	54	120	120	110	96	247	158	154	120	103	79
13	74	53	240	110	110	116	228	199	163	119	102	81
14	70	54	1400	110	110	822	214	268	150	119	100	80
15	69	55	850	110	110	1130	206	263	147	116	102	81
16	68	56	400	100	110	855	198	223	143	115	103	79
17	67	60	320	98	100	624	193	212	142	112	99	79
18	66	61	270	96	100	465	207	201	143	109	98	77
19	66	58	250	94	100	450	302	187	232	109	96	75
20	65	57	269	92	100	564	372	182	176	107	94	75
21	64	58	237	92	100	1080	389	179	163	108	92	76
22	63	57	205	90	100	763	315	170	154	105	92	76
23	62	57	180	90	100	660	269	179	148	106	92	73
24	62	56	183	90	99	512	260	1210	143	110	91	73
25	62	56	288	100	98	434	257	430	140	108	87	73
26	62	55	187	190	97	740	268	326	138	106	87	73
27	61	54	169	160	95	797	229	279	137	105	90	73
28	58	55	156	200	94	545	213	248	135	103	109	73
29	57	54	149	180	---	474	203	227	130	102	95	73
30	57	62	144	170	---	404	195	219	128	102	97	72
31	56	---	139	160	---	370	---	201	---	100	103	---
TOTAL	2499	1696	7757	4039	3193	12899	8359	7455	4763	3729	3175	2375
MEAN	80.6	56.5	250	130	114	416	279	240	159	120	102	79.2
MAX	247	62	1400	277	150	1130	480	1210	232	211	160	94
MIN	56	53	100	90	94	89	193	156	128	100	87	72
CFSM	.50	.35	1.54	.80	.70	2.57	1.72	1.48	.98	.74	.63	.49
IN.	.57	.39	1.78	.93	.73	2.96	1.92	1.71	1.09	.86	.73	.55

CAL YR 1977 TOTAL 35814 MEAN 98.1 MAX 1400 MIN 30 CFSM .61 IN 8.22
WTR YR 1978 TOTAL 61939 MEAN 170 MAX 1400 MIN 53 CFSM 1.05 IN 14.22

03267900 MAD RIVER AT ST. PARIS PIKE AT EAGLE CITY, OH

LOCATION.--Lat 39°57'51", long 83°49'54", in W 1/2 sec. 1, R. 10, T.4, Clark County, Hydrologic Unit 05080001, on left bank at downstream side of bridge on St. Paris Pike, 0.8 mi (1.3 km) southeast of Eagle City, 1.1 mi (1.8 km) downstream from Moore Run, 3.1 mi (5.0 km) upstream from Buck Creek, 3.3 mi (5.3 km) south of Tremont City, and at mile 29.5 (47.5 km).

DRAINAGE AREA.--310 mi² (803 km²).

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 904.66 ft (275.740 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good, except those for periods of ice effect, which are fair. Water supply for city of Springfield is pumped from wells, adjacent to Mad River, just upstream from station. Recharge to the well field is largely by induced infiltration from Mad River and Moore Run. Pumpage, averaging 24.5 ft³/s (0.75 m³/s) in 1978, is returned as sewage 1.4 mi (2.3 km) upstream from gaging station near Springfield (station 03269500). Water-quality data collected at this site 1966 to 1977.

AVERAGE DISCHARGE.--13 years, 296 ft³/s (8.383 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,700 ft³/s (275 m³/s) June 26, 1971, gage height, 16.00 ft (4.877 m), from rating curve extended above 3,060 ft³/s (86.7 m³/s); minimum daily, 60 ft³/s (1.70 m³/s) Jan. 27, 28, 1977 (result of freezeup).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 19.8 ft (6.04 m), from data furnished by Miami Conservancy District. Flood of Jan. 21, 1959 reached a stage of 15.7 ft (4.79 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2500 ft³/s (90.8 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 14	1600	*3810	108	*11.33	3.453	Mar. 21	1430	2870	81.3	10.17	3.100
Mar. 14	2100	3240	91.8	10.65	3.246	May 24	0800	3760	106	11.27	3.435

Minimum daily discharge, 106 ft³/s (3.00 m³/s) Nov. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	644	111	649	257	242	173	578	364	337	232	167	217
2	388	111	410	244	247	169	521	349	328	273	169	191
3	204	110	293	230	237	173	518	337	314	398	549	181
4	166	113	250	225	230	169	497	340	300	289	267	172
5	149	110	297	225	234	163	467	349	292	255	211	170
6	148	108	312	222	227	165	556	326	281	239	199	167
7	135	117	235	249	220	165	790	317	331	230	211	162
8	161	113	225	514	218	167	567	317	377	222	193	159
9	183	110	217	371	213	167	501	314	317	215	186	155
10	167	113	223	340	208	171	467	297	286	213	188	151
11	151	109	225	337	206	173	477	289	275	208	180	151
12	141	107	177	249	206	188	451	294	281	204	183	151
13	134	106	207	244	206	252	416	404	289	204	185	150
14	130	107	3040	237	204	1940	395	504	267	204	174	150
15	128	110	1600	225	195	2310	380	494	260	197	178	150
16	126	115	877	218	195	1610	368	419	252	192	220	152
17	125	119	740	218	192	1150	358	404	247	190	187	150
18	124	119	668	211	190	838	401	371	247	186	173	147
19	123	116	567	206	188	851	508	343	589	184	168	144
20	120	113	508	201	186	1030	676	328	361	182	164	142
21	119	132	448	204	184	2010	657	334	311	179	161	141
22	117	124	389	195	182	1380	549	314	278	177	159	139
23	115	122	355	195	179	1170	481	326	262	190	157	138
24	115	119	355	195	179	932	471	1920	249	199	156	138
25	117	117	622	232	177	895	622	790	242	199	153	138
26	121	116	383	405	173	1440	589	578	244	186	151	138
27	117	113	340	350	173	1270	471	487	234	179	172	138
28	115	114	300	370	173	913	426	435	242	179	230	150
29	114	112	283	300	---	790	398	407	225	175	186	136
30	113	161	273	260	---	672	380	401	218	173	218	137
31	112	---	262	247	---	611	---	361	---	173	318	---
TOTAL	4922	3467	15730	8176	5664	24107	14936	13513	8736	6526	6213	4605
MEAN	159	116	507	264	202	778	498	436	291	211	200	154
MAX	644	161	3040	514	247	2310	790	1920	589	398	549	217
MIN	112	106	177	195	173	163	358	289	218	173	151	136

CAL YR 1977 TOTAL 75831 MEAN 208 MAX 3040 MIN 60
WTR YR 1978 TOTAL 116595 MEAN 319 MAX 3040 MIN 106

03268090 CLARENCE J. BROWN RESERVOIR NEAR SPRINGFIELD, OH

LOCATION.--Lat 39°57'01", long 83°44'51", in SE 1/4 sec. 13, R.10, T.5, Clark County, Hydrologic Unit 05080001, in gatehouse of dam on Buck Creek, 1.3 mi (2.1 km) upstream from Beaver Creek, and 4.0 mi (6.4 km) northeast of city hall in Springfield.

DRAINAGE AREA.--82.0 mi² (212 km²).

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929, (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by rolled rock-fill dam having an impervious core with sand and gravel shell, and an open-cut spillway. Storage began in January 1974, recorder was installed and records began April 16, 1974. Usable capacity 53,690 acre-ft (78.5 hm³) between elevations 968.0 ft (295.05 m), lowest outlet, and 1,023.0 ft (311.81 m), crest of spillway. Dead storage below elevation 968.0 ft (295.05 m) 6 acre-ft (7,400 m³). Figures given herein represent usable contents. Reservoir is used for flood control, low-flow augmentation and recreation. There are no gates on spillway and all regulation is done by gates in conduit through dam.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 42,630 acre-ft (52.6 hm³) Feb. 28, 1975, elevation, 1,014.60 ft (309.250 m); minimum, 12,990 acre-ft (16.0 hm³) May 7, 1974, elevation, 997.73 ft (304.108 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 38,860 acre-ft (47.9 hm³) May 16, elevation, 1,012.90 ft (308.732 m); minimum, 30,750 acre-ft (37.9 hm³) Dec. 24, elevation, 1,008.95 ft (307.528 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	1010.89	34610	--
Oct. 31	1011.33	35530	+920
Nov. 30	1011.42	35710	+180
Dec. 31	1009.19	31220	-4490
CAL YR 1977	--	--	+970
Jan. 31	1009.30	31430	+210
Feb. 28	1008.97	30780	-650
Mar. 31	1011.47	35820	+5040
Apr. 30	1012.21	37370	+1550
May 31	1012.32	37610	+240
June 30	1012.52	38040	+430
July 31	1012.40	37780	-260
Aug. 31	1012.61	38230	+450
Sept. 30	1011.53	35940	-2290
WTR YR 1978	--	--	+1330

03269500 MAD RIVER NEAR SPRINGFIELD, OH

LOCATION.--Lat 39°55'23", long 83°52'13", in NW 1/4 sec. 16, R.9, T.4, Clark County, Hydrologic Unit 05080001, on right bank 150 ft (46 m) downstream from Rock Run, 300 ft (91 m) downstream from bridge on Lower Valley Pike, 2 mi (3 km) downstream from Buck Creek, 3 mi (5 km) west of Springfield, and at mile 24.1 (38.8 km).

DRAINAGE AREA.--490 mi² (1,269 km²).

PERIOD OF RECORD.--January 1904 to March 1906 (fragmentary), February 1914 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 603: 1924. WSP 823: 1929(M). WSP 1305: 1914(M), 1916-17(M), 1922-23(M), 1925(M). WSP 1625: 1924(M). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 881.42 ft (268.657 m) National Geodetic Vertical Datum of 1912. Jan. 1, 1904 to Mar. 31, 1906, nonrecording gage at site 0.3 mi (0.5 km) downstream at different datum. Feb. 1, 1914, to Feb. 29, 1924, nonrecording gage at site 1.8 mi (2.9 km) upstream at datum 6.39 ft (1.948 m) higher. Mar.1, 1924, to July 31, 1925, nonrecording gage at site 300 ft (91 m) upstream at same datum.

REMARKS.--Records good. Some regulation by C.J. Brown Reservoir, 8.3 mi (13.4 km) upstream on Buck Creek, since 1972. Occasional low-flow regulation by powerplant 2.3 mi (3.7 km) upstream; daily flows are not affected appreciably. Water-quality data collected at this site 1965 to 1973.

COOPERATION.--Gage-height charts, tapes, and 8 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--65 years, (1904-05, 1914-78), 482 ft³/s (13.65 m³/s), 13.36 in/yr (339 mm/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,500 ft³/s (864 m³/s) Jan. 21, 1959, gage height, 15.76 ft (4,804 m), from rating curve extended above 14,000 ft³/s (396 m³/s) on basis of slope-area and contracted opening measurements of peak flow; minimum daily discharge, 30 ft³/s (0.85 m³/s) Sept. 15, 1904.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 25,1913 reached a stage of 16.9 ft (5.15 m), present datum, discharge, 55,400 ft³/s (1,570 m³/s) computed by Miami Conservacy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,590 ft³/s (158 m³/s) Dec. 14, gage height, 8.39 ft (2.557 m); minimum daily, 174 ft³/s (4.93 m³/s) Oct. 23, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1030	174	1250	446	472	311	925	705	510	441	245	513
2	618	171	988	426	465	304	833	661	471	465	246	426
3	346	171	862	402	453	313	821	566	447	676	991	391
4	247	185	798	399	426	302	799	572	427	525	410	373
5	214	171	1040	404	426	291	754	586	421	466	320	330
6	238	171	994	406	420	304	974	566	407	375	300	266
7	238	201	746	473	406	299	1310	546	483	357	456	251
8	330	174	486	1110	401	296	1020	546	564	343	427	247
9	335	171	458	764	395	279	909	559	543	331	287	238
10	295	193	398	465	388	291	857	502	432	328	469	231
11	266	178	396	511	382	300	901	490	405	321	280	233
12	243	174	376	478	380	352	835	500	431	313	295	233
13	213	171	424	473	377	517	733	700	419	318	295	232
14	209	171	4210	445	379	3460	642	900	391	353	265	233
15	193	185	2450	419	365	3550	616	1000	376	284	266	232
16	189	213	1320	403	365	2340	596	720	370	283	403	238
17	189	213	1190	403	352	1730	589	1040	361	287	304	229
18	185	201	1070	395	336	1340	837	647	411	281	269	238
19	185	189	1030	386	329	1340	969	585	626	278	256	277
20	181	181	1130	378	330	1580	1220	572	534	273	245	270
21	174	295	1040	379	326	2790	1130	565	568	272	245	266
22	171	230	959	366	320	2170	982	559	487	259	238	258
23	164	213	850	359	318	2140	887	650	455	289	236	259
24	167	201	827	368	320	1800	927	2200	407	308	233	261
25	174	197	926	459	314	1440	1090	1100	365	379	229	258
26	181	189	566	601	308	2230	1170	1090	383	279	224	256
27	167	181	503	474	310	2030	927	741	373	265	341	255
28	164	201	508	610	311	1830	820	667	398	259	439	253
29	174	243	488	579	---	1530	788	615	348	251	324	250
30	174	521	468	536	---	1140	750	597	333	250	475	255
31	178	---	450	506	---	1040	---	552	---	251	866	---
TOTAL	7832	6129	29006	14823	10374	39639	26611	22299	13348	10360	10879	8252
MEAN	253	204	936	478	371	1279	887	719	445	334	351	275
MAX	1030	521	4210	1110	472	3550	1310	2200	828	676	991	513
MIN	164	171	376	359	308	279	589	490	333	250	224	229
CFSM	.52	.42	1.91	.98	.76	2.61	1.81	1.47	.91	.68	.72	.56
IN.	.59	.47	2.20	1.13	.79	3.01	2.02	1.69	1.01	.79	.83	.63

CAL YR 1977 TOTAL 123828 MEAN 339 MAX 4210 MIN 100 CFSM .69 IN 9.40
WTR YR 1978 TOTAL 199552 MEAN 547 MAX 4210 MIN 164 CFSM 1.12 IN 15.15

03270000 MAD RIVER NEAR DAYTON, OH

LOCATION.--Lat 39°47'50", long 84°05'19", in SW 1/4 sec. 7, R. 8, T.2, Green County, Hydrologic Unit 05080001, on left bank in retarding basin 300 ft (91 m) upstream from Huffman Dam, 2.3 mi (3.7 km) downstream from Mud Run, 6.2 mi (10.0 km) northeast of Dayton and at mile 6.1 (9.8 km). Water-quality sampling site on left bank 900 ft (274 m) downstream.

DRAINAGE AREA.--635 mi² (1,645 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1914 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 453: 1915. WSP 743: 1929-32. WSP 1305: 1916(M), 1925(M) 1930-32(M). drainage area.

GAGE.--Water-stage recorder. Datum of gage is 77?.06 ft (236.848 m) National Geodetic Vertical Datum of 1929. Jan. 21, 1959 to Dec. 14, 1967, at site 900 ft (274 m) downstream, at datum 77.01 ft (23.473 m) lower. See WSP 1725 for history of changes prior to Jan. 21, 1959.

REMARKS.--Records fair prior to Feb. 1, and good thereafter. Flood flows affected by backwater from Huffman retarding dam beginning in 1921, some regulation by C.J. Brown Reservoir 26 mi (48.8 km) upstream on Buck Creek since 1972. Also see REMARKS for station 03269500.

COOPERATION.--Gage-height tapes and 7 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--64 years, 618 ft³/s (17.50 m³/s), 13.22 in/yr (336 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,200 ft³/s (600 m³/s) Jan. 22, 1959 (based on Huffman retarding basin outflow records); maximum gage height, 87.9 ft (26.79 m) Feb. 26, 1929 at site and datum then in use; minimum daily discharge, 94 ft³/s (2.66 m³/s) Aug. 6, 1934, but may have been less during period 1921-24.

EXTREMES FOR PERIOD OF RECORD.--Flood of March 25, 1913 reached a stage of 14.0 ft (4.27 m), original site and datum, discharge 75,700 ft³/s (2,140 m³/s), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,260 ft³/s (177 m³/s) Mar. 15, gage height, 13.02 ft (3.968 m); minimum daily, 275 ft³/s (7.79 m³/s) Nov. 12-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1040	282	1320	500	588	392	1050	880	590	401	336	806
2	1120	282	1160	490	568	388	943	848	531	700	329	577
3	592	278	965	480	551	393	898	767	509	930	1860	500
4	411	285	893	470	528	386	877	751	479	695	768	462
5	342	285	1150	470	521	376	842	775	465	572	479	436
6	362	278	1230	470	515	382	936	735	456	475	417	359
7	370	293	916	500	506	384	1450	708	494	427	470	341
8	587	293	682	1170	495	382	1150	709	580	410	502	325
9	637	282	628	1120	486	370	995	735	663	397	424	316
10	596	289	551	800	476	382	931	697	503	390	444	308
11	524	278	556	680	470	402	988	675	456	382	479	299
12	480	275	529	560	465	462	941	684	468	372	400	296
13	428	275	565	500	463	669	840	916	495	371	395	295
14	394	275	3810	480	465	3580	726	1070	441	426	360	293
15	366	275	4200	460	452	5590	691	1140	429	373	350	293
16	346	308	1860	440	449	3490	666	1060	416	351	447	302
17	342	338	1490	430	446	2480	652	1250	406	340	441	296
18	334	315	1320	420	429	1800	821	667	406	334	361	288
19	334	308	1180	410	420	1610	1140	801	1030	328	351	306
20	326	300	1250	410	419	1930	1440	810	700	323	331	315
21	315	471	1160	400	419	2880	1420	820	746	319	319	313
22	308	423	1050	400	412	2980	1230	782	598	313	316	308
23	296	386	974	390	405	2600	1090	631	537	316	311	306
24	293	370	772	390	407	2350	1130	2150	497	388	303	300
25	308	350	1090	500	401	1800	1400	1530	431	435	295	300
26	346	342	768	860	396	3050	1670	1310	452	375	293	300
27	315	342	651	965	390	2500	1210	939	430	361	293	300
28	296	338	580	1040	394	2260	1050	802	484	352	597	300
29	285	370	560	755	---	1950	973	729	425	341	430	299
30	282	560	540	667	---	1340	925	689	408	340	481	298
31	278	---	520	627	---	1190	---	644	---	348	1380	---
TOTAL	13253	9746	34920	18254	12936	50748	31075	28104	15525	12885	14962	10439
MEAN	428	325	1126	589	462	1637	1036	907	518	416	483	348
MAX	1120	560	4200	1170	588	5590	1670	2150	1030	930	1860	806
MIN	278	275	520	390	390	370	652	644	406	313	293	288
CFSM	.67	.51	1.77	.93	.73	2.58	1.63	1.43	.82	.66	.76	.55
IN.	.78	.57	2.05	1.07	.76	2.97	1.82	1.65	.91	.75	.88	.61

CAL YR 1977 TOTAL 161261 MEAN 442 MAX 4200 MIN 147 CFSM .70 IN 9.45
WTR YR 1978 TOTAL 252847 MEAN 693 MAX 5590 MIN 275 CFSM 1.09 IN 14.81

GREAT MIAMI RIVER BASIN

03270000 MAD RIVER NEAR DAYTON, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1947-48, 1962-63, 1966 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1968 to current year.
pH: June 1968 to current year.
WATER TEMPERATURES: June 1968 to current year.
DISSOLVED OXYGEN: June 1968 to current year.

INSTRUMENTATION.--Water-quality monitor since June 1968.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. Dissolved oxygen concentrations listed as 15.0 mg/L represent concentrations of 15.0 mg/L or higher due to instrument limitations prior to March 29, 1978; 20.0 mg/L limitation thereafter.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 3,000 micromhos Sept. 13, 14, 1974; minimum, 165 micromhos June 26, 1971.
pH: Maximum, 10.1 units July 21, 1973; minimum, 4.4 units Apr. 8, 1971.
WATER TEMPERATURES: Maximum, 32.5°C July 15, 1977; minimum, 0.0°C on several days during winter periods.
DISSOLVED OXYGEN: Maximum, 15.9 mg/L May 3; minimum, 3.2 mg/L July 9, 1977.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,410 micromhos Dec. 13; minimum, 282 micromhos Mar. 14.
pH: Maximum, 8.7 units Sept. 22, 23, 27, 28; minimum, 6.9 units Mar. 22.
WATER TEMPERATURES: Maximum, 28.5°C June 29; minimum, 0.0°C Dec. 9, Jan. 10-12, 16, 20, 22.
DISSOLVED OXYGEN: Maximum, 15.9 mg/L May 3; minimum, 4.8 mg/L July 21.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	771	321	768	738	753	621	---	---	816	747	807	756
2	579	396	768	732	654	621	780	759	840	744	798	774
3	711	588	768	741	678	657	777	747	774	768	819	768
4	765	714	777	723	669	660	777	750	783	768	855	789
5	789	765	774	744	699	576	795	741	783	771	810	783
6	795	759	783	756	660	606	876	756	774	768	798	786
7	789	726	783	756	693	663	858	693	780	768	885	792
8	777	693	774	729	768	672	753	549	786	771	801	768
9	726	642	771	738	792	741	663	558	798	774	804	786
10	762	708	777	741	753	741	753	669	792	777	1060	822
11	762	744	759	717	747	726	762	750	867	786	954	870
12	762	747	786	750	738	726	774	756	864	795	900	831
13	771	747	801	771	1410	738	786	759	804	786	831	729
14	780	759	798	768	780	357	795	765	804	777	744	282
15	783	762	810	756	543	354	786	771	795	771	420	315
16	777	753	786	750	660	549	780	768	---	---	---	---
17	774	753	762	714	687	663	741	729	798	741	582	543
18	771	753	741	702	705	690	756	732	798	786	648	585
19	777	756	783	741	708	696	759	738	---	---	672	648
20	786	762	786	756	705	681	747	726	798	753	642	585
21	783	759	786	597	693	687	789	729	873	804	606	429
22	789	762	735	612	690	684	786	768	864	789	591	429
23	783	759	768	705	693	687	780	762	---	---	609	579
24	780	750	780	750	756	687	792	771	---	---	618	606
25	780	747	780	759	741	624	1180	795	---	---	678	603
26	771	744	771	738	723	654	1110	780	---	---	606	507
27	771	732	777	744	762	726	765	723	---	---	603	564
28	774	747	798	756	771	753	720	678	804	729	669	612
29	777	744	861	756	774	753	717	693	---	---	669	666
30	777	744	972	714	765	753	---	---	---	---	---	---
31	777	741	---	---	---	---	720	702	---	---	---	---
MONTH	795	321	972	597	1410	354	1180	549	873	729	1060	282

03270000 MAD RIVER NEAR DAYTON, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	726	708	765	756	---	---	783	759	711	561
2	---	---	732	711	768	759	---	---	768	759	735	711
3	---	---	759	723	771	756	---	---	426	405	741	723
4	---	---	759	732	771	759	708	690	666	441	735	717
5	756	741	753	738	777	759	732	711	735	669	729	717
6	759	705	756	738	774	765	768	729	759	735	768	726
7	708	639	756	735	783	738	780	759	762	729	786	768
8	705	654	762	750	759	690	783	759	750	654	783	768
9	720	705	768	744	723	642	777	753	756	675	780	768
10	735	714	756	735	765	687	771	753	774	702	777	762
11	738	699	762	732	774	756	765	747	714	522	777	759
12	726	696	762	741	774	720	768	753	756	609	768	759
13	732	723	756	630	756	705	813	750	753	717	783	765
14	750	729	669	645	762	738	768	720	747	696	780	771
15	750	738	684	669	765	753	744	696	777	714	789	762
16	747	738	726	690	777	759	765	750	771	687	786	717
17	744	732	699	660	780	759	768	753	693	600	774	759
18	777	651	753	708	774	717	771	753	774	702	798	756
19	693	558	756	735	690	489	783	759	774	660	795	768
20	690	624	756	732	729	561	777	762	780	753	765	741
21	666	630	744	723	735	630	774	768	774	750	753	741
22	696	669	744	723	744	684	780	759	774	759	750	738
23	720	699	741	669	753	738	771	729	771	756	750	729
24	705	690	681	336	759	741	747	657	771	756	747	726
25	708	609	690	489	765	753	723	684	780	759	738	726
26	678	600	705	666	780	744	726	576	765	756	738	720
27	720	681	744	669	777	744	813	735	771	744	747	726
28	726	711	750	735	780	669	774	738	762	498	744	732
29	729	711	753	738	771	720	780	762	702	549	747	732
30	729	711	753	747	777	765	768	753	735	579	795	729
31	---	---	765	732	---	---	774	723	681	486	---	---
MONTH	777	558	768	336	783	489	813	576	783	405	798	561
YEAR	1410	282										

03270000 MAD RIVER NEAR DAYTON, OH--Continued

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.1	7.6	8.5	8.0	7.9	7.8	---	---	8.0	7.6	---	---
2	7.9	7.7	8.6	7.9	8.0	7.9	8.0	7.9	7.8	7.5	---	---
3	8.1	7.9	8.6	8.0	8.1	8.0	8.1	7.9	8.2	7.4	---	---
4	8.2	8.0	8.4	7.9	8.1	8.0	8.0	7.8	8.0	7.4	---	---
5	8.2	8.0	8.4	8.0	8.0	7.9	8.1	7.8	8.2	7.3	---	---
6	8.2	8.0	8.3	7.9	8.1	7.9	8.1	7.8	8.5	7.5	---	---
7	8.2	7.9	8.3	7.9	8.1	8.0	8.1	7.9	8.3	7.7	---	---
8	8.0	7.9	8.4	7.9	8.0	7.8	8.1	7.7	8.3	7.6	---	---
9	8.0	7.8	8.5	7.9	8.1	7.9	8.0	7.8	8.3	7.5	---	---
10	8.2	7.9	8.5	8.0	8.1	8.0	7.9	7.6	8.2	7.5	---	---
11	8.1	8.0	8.3	8.0	8.0	7.9	7.7	7.5	8.1	7.6	---	---
12	8.2	8.0	8.1	7.8	7.9	7.8	7.8	7.7	8.0	7.8	---	---
13	8.3	8.0	8.1	7.7	7.9	7.6	7.8	7.5	7.8	7.4	---	---
14	8.3	8.0	8.2	7.6	7.7	7.5	7.7	7.4	8.2	7.5	---	---
15	8.3	8.0	8.3	7.8	7.7	7.6	7.9	7.5	---	---	---	---
16	8.2	8.0	8.1	7.8	7.8	7.7	7.7	7.7	---	---	---	---
17	8.3	8.0	8.1	7.8	7.9	7.8	---	---	---	---	---	---
18	8.3	8.0	8.1	7.8	7.9	7.9	7.7	7.4	---	---	8.2	7.8
19	8.4	8.0	8.2	7.9	8.0	7.9	7.7	7.3	---	---	8.1	7.9
20	8.4	7.9	8.2	7.8	8.0	7.7	7.8	7.4	---	---	8.1	7.9
21	8.4	7.9	8.1	7.8	8.0	7.9	8.1	7.5	---	---	7.9	7.1
22	8.5	8.0	8.1	7.7	8.0	7.9	8.0	7.5	---	---	8.0	6.9
23	8.5	8.0	8.2	7.8	8.0	7.8	8.2	7.4	---	---	8.1	8.0
24	8.6	8.0	8.2	7.8	7.9	7.4	7.9	7.5	---	---	8.1	8.1
25	8.3	8.0	8.1	7.9	7.9	7.9	8.0	7.6	---	---	8.2	8.1
26	8.3	7.9	8.3	7.9	8.0	7.9	8.1	7.4	---	---	8.1	8.0
27	8.4	7.9	8.1	7.9	8.1	7.9	7.9	7.7	---	---	8.1	8.0
28	8.6	7.9	8.2	7.8	8.1	7.9	7.9	7.5	---	---	8.2	8.1
29	8.6	7.9	8.2	7.8	7.9	7.3	7.7	7.5	---	---	8.1	8.1
30	8.6	8.0	7.9	7.3	8.0	7.8	7.7	7.5	---	---	---	---
31	8.6	8.0	---	---	---	---	8.0	7.5	---	---	---	---
MONTH	8.6	7.6	8.6	7.3	8.1	7.3	8.2	7.3	8.5	7.3	8.2	6.9

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	8.6	8.1	8.2	8.0	---	---	8.5	8.2	8.4	8.1
2	---	---	8.6	8.1	8.2	8.0	---	---	8.5	8.1	8.4	8.2
3	---	---	8.6	8.1	8.3	8.1	---	---	7.9	7.8	8.4	8.2
4	---	---	8.3	8.0	8.3	8.1	---	---	8.2	7.9	8.5	8.2
5	8.1	8.0	8.3	8.1	8.4	8.1	8.3	8.1	8.3	8.2	8.5	8.2
6	8.1	8.0	8.6	8.1	8.3	8.1	8.4	8.1	8.3	8.2	8.5	8.2
7	8.1	8.0	8.4	8.1	8.2	7.9	8.4	8.0	8.4	8.2	8.5	8.2
8	8.2	8.0	8.4	8.1	8.1	7.9	8.5	8.1	8.4	8.1	8.6	8.2
9	8.3	8.1	8.5	8.0	8.1	7.9	8.5	8.1	8.4	8.1	8.6	8.2
10	8.2	8.0	8.6	8.0	8.2	7.9	8.5	8.1	8.4	8.1	8.6	8.2
11	8.2	8.0	8.6	8.0	8.3	8.0	8.6	8.2	8.4	8.1	8.6	8.2
12	8.3	8.1	8.4	7.9	8.3	8.0	8.6	8.2	8.4	8.1	8.5	8.2
13	8.4	8.1	8.3	7.9	8.4	8.0	8.5	8.1	8.4	8.2	8.6	8.2
14	8.4	8.1	8.2	8.0	8.4	8.1	8.4	8.1	8.4	8.1	8.4	8.2
15	8.5	8.1	8.2	8.1	8.4	8.1	8.4	7.9	8.4	8.2	8.6	8.2
16	8.5	8.1	8.2	8.1	8.4	8.1	8.6	8.1	8.4	8.1	8.5	8.2
17	8.6	8.2	8.3	8.1	8.4	8.0	8.6	8.1	8.3	8.0	8.5	8.2
18	8.4	8.0	8.2	7.9	8.5	8.0	8.6	8.1	8.5	8.1	8.6	8.1
19	8.2	8.0	8.3	7.9	8.1	7.8	8.5	8.0	8.5	8.2	8.6	8.2
20	8.1	8.1	8.3	7.9	8.1	7.8	8.5	8.0	8.6	8.2	8.6	8.2
21	8.3	8.1	8.2	8.0	8.1	7.9	8.4	8.0	8.6	8.2	8.6	8.2
22	8.5	8.2	8.4	8.1	8.4	7.9	8.5	8.0	8.6	8.2	8.7	8.3
23	8.3	8.2	8.2	8.0	8.3	8.0	8.5	8.1	8.6	8.2	8.7	8.4
24	8.5	8.1	8.0	7.7	8.4	8.1	8.2	7.9	8.6	8.2	8.6	8.2
25	8.2	8.1	8.0	7.8	8.4	8.0	8.2	8.0	8.6	8.1	8.6	8.2
26	8.4	8.1	8.2	7.9	8.4	8.0	8.4	7.9	8.6	8.2	8.6	8.2
27	8.5	8.1	8.1	8.0	8.4	8.0	8.4	8.1	8.6	8.2	8.7	8.2
28	8.5	8.1	8.2	8.0	8.4	7.9	8.5	8.1	8.2	7.9	8.7	8.2
29	8.4	8.1	8.2	8.0	8.4	7.9	8.4	8.1	8.4	7.9	8.6	8.2
30	8.6	8.1	8.2	8.0	8.4	8.0	8.4	8.1	8.3	8.1	8.4	8.2
31	---	---	8.3	8.0	---	---	8.5	8.2	8.3	8.1	---	---
MONTH	8.6	8.0	8.6	7.7	8.5	7.8	8.6	7.9	8.6	7.8	8.7	8.1
YEAR	8.7	6.9										

03270000 MAD RIVER NEAR DAYTON, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	20.5	18.5	17.0	15.0	9.0	6.0	---	---	---	---	7.5	4.0
2	18.5	15.5	18.0	15.0	6.5	6.0	---	---	---	---	5.0	3.0
3	17.5	14.0	18.5	16.5	7.0	6.5	---	---	---	---	5.5	3.0
4	17.5	13.5	18.5	18.0	6.5	5.5	---	---	---	---	6.0	2.5
5	18.0	14.5	20.0	17.5	5.5	4.5	---	---	---	---	5.5	2.0
6	18.5	15.5	19.0	18.0	4.5	2.0	---	---	---	---	6.0	4.5
7	16.5	14.0	18.0	17.5	2.0	1.0	---	---	---	---	8.0	5.5
8	16.0	14.5	19.0	17.0	2.5	1.5	---	---	---	---	5.0	4.0
9	16.0	13.5	18.5	18.0	2.5	.0	---	---	---	---	7.0	4.0
10	15.5	12.5	18.5	11.5	1.5	.5	.5	.0	---	---	8.5	4.5
11	14.0	13.0	11.0	9.5	1.5	.5	1.0	.0	---	---	8.0	5.5
12	13.5	11.5	10.0	9.0	2.5	.5	2.0	.0	---	---	7.5	6.0
13	14.5	11.0	9.5	7.0	4.0	2.5	3.0	1.0	---	---	7.5	4.5
14	15.0	11.0	8.5	5.5	5.0	3.5	3.0	2.0	---	---	4.5	1.5
15	15.0	12.0	8.5	6.0	---	---	2.5	1.5	---	---	4.5	1.5
16	13.5	12.0	11.5	9.0	---	---	2.0	.0	---	---	---	---
17	13.0	9.5	11.5	9.0	---	---	1.0	.5	7.0	1.5	4.5	3.5
18	13.0	10.5	8.5	7.0	---	---	3.0	.5	6.5	4.5	4.5	2.5
19	14.5	12.0	7.5	6.5	---	---	3.5	1.0	4.0	3.5	6.0	4.5
20	15.5	12.0	10.0	7.5	---	---	2.5	.0	6.0	3.0	6.5	4.0
21	15.5	12.0	11.0	8.5	---	---	3.0	.5	5.5	2.5	7.0	4.0
22	17.0	13.5	8.5	6.0	---	---	1.5	.0	6.5	2.0	7.0	3.5
23	16.5	14.5	8.5	6.0	---	---	---	---	---	---	7.0	6.0
24	17.0	14.0	8.5	6.5	---	---	---	---	---	---	6.0	5.0
25	16.0	15.0	7.0	5.0	---	---	---	---	---	---	6.0	4.5
26	17.5	16.0	5.5	3.0	---	---	---	---	---	---	6.0	5.5
27	18.0	16.0	3.5	2.5	---	---	---	---	---	---	6.0	5.0
28	17.0	15.0	4.5	2.0	---	---	---	---	6.0	5.0	8.0	5.0
29	16.0	13.5	6.5	3.0	---	---	---	---	---	---	8.0	7.5
30	15.5	13.0	8.5	5.0	---	---	---	---	---	---	---	---
31	15.5	13.5	---	---	---	---	---	---	---	---	---	---
MONTH	20.5	9.5	20.0	2.0	9.0	.0	3.5	.0	7.0	1.5	8.5	1.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	15.0	11.5	23.5	19.5	---	---	24.0	19.5	21.0	18.5
2	---	---	15.5	11.5	21.5	19.5	---	---	25.0	21.0	22.5	18.5
3	---	---	15.5	11.5	21.5	18.0	---	---	22.0	21.5	22.5	18.5
4	---	---	13.0	11.5	20.0	17.5	---	---	23.0	20.0	22.5	18.5
5	14.0	12.5	11.5	10.5	21.0	16.5	21.0	18.5	21.0	19.0	23.0	18.0
6	12.5	11.5	12.5	10.0	21.0	17.0	23.5	18.0	20.0	19.0	24.0	19.0
7	13.5	11.0	11.5	11.0	21.0	18.5	24.5	19.5	21.0	18.5	24.5	19.5
8	13.0	11.5	14.0	11.0	21.5	19.0	25.5	21.0	23.0	19.0	25.0	20.0
9	12.5	10.5	16.0	13.0	22.5	19.0	24.5	20.5	24.5	20.0	25.5	21.0
10	14.5	10.5	17.0	13.0	23.0	18.0	23.0	21.0	25.5	20.5	25.5	21.5
11	14.5	12.5	17.5	13.0	23.5	18.5	23.5	18.5	22.5	20.5	24.0	21.0
12	14.0	11.0	16.5	15.0	22.0	19.0	23.0	18.0	23.0	20.0	23.0	21.5
13	15.0	12.5	16.5	14.5	21.0	18.0	23.5	19.0	24.0	19.5	24.0	21.0
14	14.0	11.0	14.0	12.0	20.5	16.0	25.0	20.5	23.5	20.0	22.5	21.0
15	14.5	10.5	13.0	11.5	19.5	16.0	24.5	21.0	25.0	21.0	24.0	19.0
16	13.0	10.5	13.5	12.5	21.0	17.0	26.0	20.5	25.5	22.0	22.5	20.0
17	14.0	9.5	16.0	12.5	23.5	19.0	24.5	19.5	25.5	21.0	23.0	20.0
18	13.0	11.0	19.0	14.5	25.0	20.5	24.5	20.0	26.0	21.0	24.0	20.5
19	12.0	11.0	21.0	16.0	23.0	20.5	25.5	20.5	25.0	22.0	25.5	21.0
20	10.5	8.5	21.0	17.5	23.0	20.0	27.0	21.5	24.5	19.5	26.0	21.5
21	8.5	6.0	18.5	15.0	22.5	20.5	27.0	23.0	23.0	18.5	25.5	22.5
22	11.0	7.5	17.0	13.5	22.0	19.0	28.0	23.5	24.5	18.5	23.0	20.0
23	11.0	10.0	17.5	15.5	22.0	18.0	26.5	23.5	24.5	19.0	20.5	16.5
24	13.0	9.0	17.0	16.0	23.5	19.0	25.0	22.0	25.0	20.5	20.0	16.5
25	12.5	10.0	18.5	16.0	24.0	20.0	23.0	21.0	26.0	22.0	19.5	16.0
26	12.5	9.0	20.0	17.0	24.5	20.0	25.5	20.5	25.5	22.5	19.5	15.0
27	14.5	10.5	21.0	18.0	27.5	22.0	24.5	21.5	25.0	21.5	19.5	15.0
28	15.5	12.0	21.5	18.0	28.0	23.0	26.0	21.0	24.5	21.5	19.0	15.5
29	15.0	12.5	22.0	18.0	28.5	23.5	23.5	21.0	24.5	22.0	19.0	14.5
30	16.0	13.0	21.0	19.0	28.0	23.0	22.5	20.5	22.5	19.5	17.5	15.5
31	---	---	23.0	19.0	---	---	23.0	19.5	19.5	18.0	---	---
MONTH	16.0	7.5	23.0	10.0	28.5	16.0	28.0	18.0	26.0	18.0	26.0	14.5
YEAR	28.5	.0										

03270000 MAD RIVER NEAR DAYTON, OH--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.8	6.3	12.8	6.4	10.5	9.1	---	---	13.3	12.2	15.0	10.8
2	8.1	7.4	12.6	6.1	11.3	10.5	---	---	14.2	11.7	15.0	11.0
3	9.0	8.1	12.0	6.0	10.9	10.2	---	---	14.8	12.0	15.0	11.0
4	9.5	8.2	9.0	5.5	11.2	10.2	---	---	14.7	12.0	15.0	11.0
5	9.4	7.9	10.7	5.9	10.7	10.4	---	---	15.0	11.7	15.0	11.6
6	9.2	7.5	9.8	5.1	11.5	10.7	---	---	15.0	11.9	15.0	11.2
7	9.7	7.3	8.0	5.5	13.1	11.6	---	---	15.0	12.1	15.0	10.5
8	8.2	7.6	9.7	5.5	12.7	11.8	---	---	15.0	12.3	15.0	10.4
9	8.7	7.4	9.5	5.4	12.7	11.5	---	---	15.0	11.8	15.0	10.8
10	10.0	8.0	9.8	6.0	12.9	12.0	13.4	12.9	15.0	11.7	15.0	10.0
11	9.0	8.4	11.5	8.3	12.8	12.2	13.2	12.4	15.0	11.7	15.0	9.6
12	10.0	8.3	12.0	8.4	12.2	11.2	12.7	12.1	15.0	11.6	13.7	9.2
13	10.4	8.4	12.5	9.0	11.2	10.5	12.5	12.0	15.0	11.3	15.0	9.8
14	10.5	8.2	12.1	9.0	13.0	10.5	12.4	11.8	15.0	11.1	15.0	11.0
15	10.5	8.0	11.1	9.1	12.7	11.6	12.6	11.8	15.0	11.9	---	---
16	10.6	7.8	10.4	7.9	11.5	10.9	12.8	12.0	15.0	12.1	---	---
17	11.2	8.4	10.3	7.3	10.9	10.5	12.1	11.6	15.0	11.0	---	---
18	10.9	8.5	11.1	7.9	10.5	10.3	12.7	11.5	15.0	12.0	---	---
19	11.0	7.7	12.2	8.6	10.7	10.4	12.7	11.7	15.0	12.2	---	---
20	11.2	7.5	12.1	8.6	10.9	10.3	13.0	11.7	15.0	12.6	---	---
21	11.5	7.5	10.4	8.5	11.5	10.9	---	---	15.0	11.8	11.1	10.9
22	12.0	7.2	11.1	8.3	11.7	11.4	---	---	15.0	11.6	11.7	11.4
23	11.9	6.9	10.9	8.8	11.7	11.1	14.1	12.4	---	---	11.8	11.4
24	12.4	6.9	11.7	8.4	11.0	10.0	13.5	12.0	---	---	---	---
25	10.5	6.9	11.0	8.6	11.1	10.2	11.4	11.2	---	---	11.8	11.6
26	10.3	6.2	13.0	9.8	11.9	11.1	12.4	11.2	---	---	11.9	11.6
27	11.3	5.6	12.3	10.3	12.6	11.8	12.7	11.8	---	---	11.9	11.5
28	12.0	6.3	13.3	10.5	12.5	12.2	12.9	12.2	15.0	12.0	12.4	11.0
29	12.2	6.3	12.9	9.8	12.3	11.5	14.1	12.1	---	---	11.1	10.9
30	12.7	6.7	10.9	9.1	11.7	11.1	12.1	12.1	---	---	---	---
31	12.2	6.6	---	---	---	---	14.2	11.7	---	---	---	---
MONTH	12.7	5.6	13.3	5.1	13.1	9.1	14.2	11.2	15.0	11.0	15.0	9.2

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	15.1	8.8	9.3	7.0	---	---	9.9	6.0	8.6	7.2
2	---	---	15.4	8.8	8.9	7.1	---	---	10.1	5.5	8.8	7.1
3	---	---	15.9	8.5	10.4	7.3	---	---	7.0	6.9	8.9	6.9
4	---	---	11.0	8.0	10.2	7.4	---	---	7.7	7.0	9.2	6.8
5	10.9	9.9	11.4	8.3	10.9	7.6	9.0	7.3	8.0	7.0	9.4	6.8
6	10.4	9.6	15.5	8.9	10.9	7.3	10.1	7.1	8.1	7.0	9.8	6.6
7	10.6	9.8	12.2	8.7	9.3	7.0	10.2	6.7	8.4	7.2	10.0	6.2
8	11.0	9.8	12.5	8.6	9.2	6.4	10.4	6.4	9.1	6.7	10.4	5.9
9	11.6	10.1	14.0	7.7	7.8	6.7	10.3	6.2	9.1	6.5	10.4	5.7
10	11.6	9.5	15.4	7.4	9.5	6.9	10.2	6.1	8.7	6.3	10.2	5.3
11	10.6	8.7	15.5	7.5	10.3	7.0	11.4	6.7	8.8	6.4	10.3	5.2
12	12.4	9.7	11.2	6.8	9.7	6.9	11.8	6.7	8.5	6.3	9.0	5.3
13	12.6	9.4	10.2	7.1	10.7	6.8	10.4	6.5	9.1	6.5	10.2	5.5
14	13.2	9.5	9.2	7.6	11.6	7.5	10.6	6.2	9.2	6.3	8.5	5.5
15	14.0	9.6	10.5	8.7	11.0	7.6	10.6	5.5	9.2	6.2	10.6	5.7
16	14.5	9.5	10.3	8.3	11.4	7.5	11.6	5.7	8.5	5.8	9.5	5.5
17	15.5	9.7	11.0	8.5	11.6	7.0	11.7	5.8	8.5	5.5	10.0	5.5
18	11.5	8.9	11.2	7.9	11.9	6.5	12.0	5.8	9.4	5.9	10.3	5.4
19	10.1	8.5	11.1	7.4	7.3	6.2	12.2	5.7	9.1	5.6	9.8	5.3
20	10.5	9.7	10.6	6.7	7.7	6.9	11.5	5.3	10.1	5.7	9.8	5.1
21	11.5	10.4	9.4	7.0	7.9	6.6	10.5	4.8	10.8	5.9	9.6	5.1
22	13.2	10.5	11.7	7.9	9.9	6.7	10.6	5.0	10.8	6.3	9.9	5.3
23	11.0	9.4	9.8	7.3	10.0	7.3	10.0	4.8	11.1	6.0	10.9	6.2
24	13.5	9.8	8.5	7.0	10.7	7.1	8.0	5.0	11.4	5.7	10.9	6.3
25	10.3	9.0	8.6	7.8	10.6	6.8	7.5	5.4	11.4	5.5	10.8	6.2
26	12.1	10.0	8.5	7.7	10.0	6.4	9.9	5.5	10.8	5.2	11.0	6.4
27	13.3	9.6	8.6	7.3	10.9	6.0	9.3	5.2	11.1	5.3	11.2	6.2
28	13.8	9.1	8.7	7.2	10.1	5.7	10.0	5.3	6.9	5.4	11.2	6.2
29	13.4	8.7	9.0	7.6	10.7	5.1	9.2	5.4	8.1	5.3	11.1	6.3
30	14.7	8.6	8.7	7.1	10.5	5.5	8.4	5.5	7.0	5.6	9.3	6.2
31	---	---	9.3	7.0	---	---	9.6	6.0	7.7	6.2	---	---
MONTH	15.5	8.5	15.9	6.7	11.9	5.1	12.2	4.8	11.4	5.2	11.2	5.1
YEAR	15.9	4.8										

03270500 GREAT MIAMI RIVER AT DAYTON, OH

LOCATION.--Lat 39°45'55", long 84°11'51", in sec. 10, R.7, T.1, Montgomery County, Hydrologic Unit 05080002, on left bank 1,000 ft (305 m) downstream from Main Street Bridge in Dayton, 0.7 mi (1.1 km) upstream from Wolf Creek, 0.8 mi (1.3 km) downstream from Mad River, and at mile 80.0 (128.7 km).

DRAINAGE AREA.--2,511 mi² (6,503 km²).

PERIOD OF RECORD.--April to September 1905, January to September 1906, January 1907 to December 1909 (gage heights only), April 1913 to current year. Monthly discharge only for October 1919 to September 1921, published in WSP 1305. Gage-height records collected at Main Street Bridge since January 1892 are contained in reports of National Weather Service. Prior to October 1962, published as Miami River at Dayton.

REVISED RECORDS.--WSP 1385: 1917. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft (213.360 m) National Geodetic Vertical Datum of 1912. Prior to Oct. 1, 1921, nonrecording gage at Main Street Bridge at datum 23.73 ft (7.233 m) higher. Oct. 1, 1921, to July 24, 1931, nonrecording gage at Main Street Bridge at datum 21.00 ft (6.401 m) higher.

REMARKS.--Records fair. Flood flow regulated by four retarding basins upstream from station beginning in 1920 on Mad River 6.5 mi (10.5 km) upstream, on Stillwater River 10.5 mi (16.9 km) upstream, on Great Miami River 11.5 mi (18.5 km) upstream, and on Loramie Creek 40 mi (64 km) upstream. Also see REMARKS for stations 03261500, 03261950 and 03269500. Water is diverted 6 mi (10 km) upstream from station for use in Dayton; most of return flow from diversions bypasses station in Dayton sewer systems. Sediment data collected at this site 1951 to 1953.

COOPERATION.--Gage-height charts, tapes, and 16 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--49 years (1929-78). 2,099 ft³/s (59.44 m³/s)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 60,900 ft³/s (1,720 m³/s) Jan. 22, 1959, gage height, 35.45 ft (10.805 m) in gage well, from graph based on gage readings; 36.0 ft (10.97 m), from outside floodmarks; minimum daily, 109 ft³/s (3.09 m³/s) Aug. 8, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913 reached a stage of 29.0 ft (8.84 m), site and datum then in use, discharge, 250,000 ft³/s (7,080 m³/s), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 26,100 ft³/s (739 m³/s) Mar. 18, gage height, 31.38 ft (9.565 m) in gage well; minimum daily, 380 ft³/s (10.8 m³/s) Oct. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1800	500	2600	1500	1800	800	5140	2600	1500	760	520	2100
2	4170	440	5000	1400	1700	800	4450	2330	1400	1400	520	1410
3	2930	430	4000	1300	1600	780	3890	2020	1300	3200	4300	1080
4	1300	420	2700	1200	1500	780	3700	1830	1200	4210	2100	910
5	900	410	3000	1300	1500	780	3530	1840	1100	2290	1200	826
6	760	400	3100	1200	1400	790	3700	1590	1050	1500	900	736
7	680	400	2000	1400	1400	800	6580	1300	1100	1200	890	687
8	940	420	1700	3000	1400	820	6280	1230	1200	1000	1100	644
9	1020	460	1800	4500	1300	880	4660	1290	1300	980	850	613
10	920	560	1600	5000	1300	960	3830	1250	1300	880	800	593
11	1070	520	1400	3500	1200	1200	3520	1200	1100	800	790	571
12	920	480	1400	2600	1200	2000	3220	1150	1000	740	800	545
13	780	460	1600	2300	1200	13000	2900	2120	1100	730	750	529
14	690	440	11000	2000	1200	26000	2460	3790	1200	820	660	515
15	630	510	25000	1800	1100	25500	2200	4580	1200	740	650	494
16	580	570	18000	1600	1100	24100	1950	4190	1000	700	830	546
17	550	740	16000	1400	1100	21700	1770	3910	900	650	940	519
18	500	780	15000	1300	1100	19200	2180	3170	900	620	770	486
19	450	760	16000	1200	1000	16700	4500	2610	2100	600	697	470
20	420	720	14000	1200	1000	15200	7590	2310	1800	580	611	457
21	400	920	10000	1100	960	15900	9460	2150	1600	550	560	445
22	400	860	6000	1100	940	18100	7580	1940	1300	540	550	435
23	400	800	4300	1100	920	16700	5690	2100	1100	550	540	431
24	380	740	3500	1000	900	14700	5170	5010	1000	680	520	435
25	400	700	4800	1200	880	11400	6300	5390	900	750	500	435
26	540	680	4200	2500	860	13800	8690	3980	900	860	480	442
27	480	670	3000	2800	840	14600	6950	3100	850	600	540	444
28	450	660	2200	2600	820	13000	4390	2520	950	590	1100	438
29	430	750	2000	2300	---	10100	3360	2140	850	560	2100	429
30	400	1200	1800	2000	---	7260	2930	1870	800	550	1600	442
31	430	---	1600	1900	---	5920	---	1530	---	550	3000	---
TOTAL	26720	18400	190300	60300	33220	314270	138570	78040	35000	30980	32176	19107
MEAN	862	613	6139	1945	1186	10140	4619	2517	1167	999	1038	637
MAX	4170	1200	25000	5000	1800	26000	9460	5390	2100	4210	4300	2100
MIN	380	400	1400	1000	820	780	1770	1150	800	540	480	429

CAL YR 1977 TOTAL 522203 MEAN 1431 MAX 25000 MIN 206
WTR YR 1978 TOTAL 977083 MEAN 2677 MAX 26000 MIN 380

03270800 WOLF CREEK AT TROTWOOD, OH

LOCATION.--Lat 39°47'39", long 84°18'36", Montgomery County, Hydrologic Unit 05080002, on right bank 350 ft (107 m) downstream from Union Road Bridge, 700 ft (213 m) downstream from unnamed right bank tributary, 0.2 mi (0.3 km) south of Trotwood, and 0.3 mi (0.5 km) upstream from North Branch.

DRAINAGE AREA.--22.7 mi² (58.8 km²).

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 826.28 ft (251.850 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair.

COOPERATION.--Gage-height tapes and 9 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--16 years, 20.5 ft³/s (0.581 m³/s), 12.26 in/yr (311 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,970 ft³/s (84.1 m³/s) May 24, 1968, gage height, 6.47 ft (1.972 m), from rating curve extended above 1,000 ft³/s (28.3 m³/s); no flow all or part of each day Sept. 8-17, Oct. 3, 1964, Sept. 16-19, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge during flood in January 1959, about 3,900 ft³/s (110 m³/s), gage height, 8.0 ft (2.44 m), computed by Miami Conservancy District on basis of estimate of peak flow based on contracted-opening measurement at site 1.1 mi (1.8 km) downstream with drainage area of 48.2 mi² (125 km²), adjusted to gage site by 0.8 power of the drainage-area ratio. Flood in March 1913 reached a stage of 9.4 ft (2.87 m), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s (19.8 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 14	0530	1320	37.4	4.22	1.286	Mar. 14	1100	*1720	48.7	*4.82	1.469

Minimum discharge, 0.57 ft³/s (0.016 m³/s) Aug. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	2.2	137	7.6	15	3.1	19	18	9.6	7.8	1.6	14
2	7.6	1.8	41	7.2	13	3.0	15	15	8.7	17	1.4	6.2
3	2.4	1.8	32	6.8	11	3.0	15	14	7.8	23	118	3.8
4	1.4	1.8	23	6.4	10	3.0	14	15	7.0	11	14	2.5
5	1.0	2.2	117	6.2	9.2	2.9	13	14	6.5	7.6	5.8	1.9
6	2.1	2.4	63	6.0	8.4	2.9	32	12	6.0	6.2	3.9	1.6
7	1.4	5.1	28	30	7.8	2.8	43	11	9.7	5.3	12	1.4
8	6.6	3.3	24	91	7.2	2.8	24	12	8.3	4.3	6.0	1.3
9	9.3	3.1	21	41	6.6	3.5	19	12	6.1	3.7	3.3	1.2
10	4.2	7.5	19	25	6.2	11	17	9.6	4.9	3.4	5.1	1.1
11	2.5	6.2	18	18	5.8	28	21	8.5	4.7	3.0	2.5	1.0
12	1.8	4.1	17	14	5.4	100	16	10	7.8	2.4	2.0	1.1
13	1.5	3.1	79	11	5.2	260	13	103	10	4.7	1.8	1.3
14	1.3	2.6	726	9.6	4.9	1190	11	85	6.4	3.4	1.5	1.3
15	1.5	3.0	187	9.0	4.7	350	10	76	5.5	2.3	1.5	1.6
16	1.5	6.0	50	8.4	4.5	208	9.3	47	5.5	2.1	1.8	9.5
17	1.3	9.9	60	7.8	4.3	125	9.0	45	5.4	1.7	1.7	4.0
18	1.5	7.3	199	7.4	4.1	82	34	30	9.9	1.6	1.3	1.4
19	1.5	5.3	79	7.0	4.0	106	25	23	100	1.5	1.6	1.1
20	1.3	4.3	49	7.4	3.8	116	96	20	28	1.4	1.3	.91
21	1.3	29	30	6.8	3.7	198	44	18	28	1.4	.99	.84
22	1.2	15	21	6.2	3.6	99	27	15	17	1.6	.94	.80
23	1.3	9.8	17	6.8	3.5	63	28	43	12	1.6	.90	.86
24	1.2	7.4	34	7.6	3.4	73	52	248	10	7.2	.79	.88
25	6.1	6.0	82	9.2	3.3	148	211	70	9.5	4.3	.65	.78
26	11	5.2	25	52	3.2	184	118	37	12	2.1	.79	.80
27	3.9	6.1	15	38	3.2	76	50	24	7.8	1.6	.88	.87
28	3.0	3.8	11	30	3.1	49	31	19	6.9	1.4	9.5	.79
29	2.6	3.4	9.8	25	---	35	24	16	5.1	1.2	2.3	.85
30	2.6	46	8.6	21	---	26	21	13	4.4	3.1	21	1.5
31	2.2	---	8.2	18	---	22	---	11	---	2.6	54	---
TOTAL	129.1	214.7	2270.6	547.4	188.1	3596.0	1061.3	1094.1	370.5	141.5	280.84	67.18
MEAN	4.16	7.16	73.2	17.7	6.00	116	35.4	35.3	12.4	4.56	9.06	2.24
MAX	41	46	726	91	15	1190	211	248	100	23	118	14
MIN	1.0	1.8	8.2	6.0	3.1	2.8	9.0	8.5	4.4	1.2	.65	.78
CFSM	.18	.32	3.23	.78	.26	5.11	1.56	1.56	.55	.20	.40	.10
IN.	.21	.35	3.72	.90	.28	5.89	1.74	1.79	.61	.23	.46	.11

CAL YR 1977 TOTAL 6466.84 MEAN 17.7 MAX 726 MIN .38 CFSM .78 IN 10.60
WTR YR 1978 TOTAL 9941.32 MEAN 27.2 MAX 1190 MIN .65 CFSM 1.20 IN 16.29

03271075 GREAT MIAMI RIVER NEAR STEWART STREET AT DAYTON, OH

LOCATION.--Lat 39°44'31", long 84°11'41", Montgomery County, Hydrologic Unit 05080002, on right bank 0.13 mi (0.21 km) upstream from Stewart Street bridge, 1.2 mi (1.9 km) downstream from Wolf Creek in Dayton, and at mile 78.10 (125.66 km).

DRAINAGE AREA.--2,587 mi² (6,700 km²).

PERIOD OF RECORD.--June 1978 to September 1978.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1978 to September 1978.
pH: June 1978 to September 1978.
WATER TEMPERATURES: June 1978 to September 1978.
DISSOLVED OXYGEN: June 1978 to September 1978.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. See records of daily discharge for station at Dayton (station 03270500).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 852 micromhos Sept. 30, 1978; minimum recorded, 220 micromhos Aug. 3, 1978.
pH: Maximum recorded, 8.9 units June 28-30, July 14, 15, 17, 24, Sept. 8-10, 20, 25-28, 1978; minimum recorded, 7.3 units Aug. 3, 1978.
WATER TEMPERATURES: Maximum recorded, 30.5°C June 29, 1978; minimum recorded, 16.5°C Sept. 29, 1978.
DISSOLVED OXYGEN: Maximum recorded, 19.0 mg/L Sept. 30, 1978; minimum recorded, 3.9 mg/L Sept. 14, 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 852 micromhos Sept. 30; minimum recorded, 220 micromhos Aug. 3.
pH: Maximum recorded, 8.9 units June 28-30, July 14, Aug. 15, 17, 24, Sept. 8-10, 20, 25-28; minimum recorded, 7.3 units Aug. 3.
WATER TEMPERATURES: Maximum recorded, 30.5°C June 29; minimum recorded, 16.5°C Sept. 29.
DISSOLVED OXYGEN: Maximum recorded, 19.0 mg/L Sept. 30; minimum recorded, 3.9 mg/L Sept. 14.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1					---	---	744	594	750	720	682	530
2					---	---	672	524	760	710	716	684
3					---	---	620	532	744	220	734	716
4					---	---	680	578	544	440	744	736
5					---	---	636	606	666	548	758	738
6					---	---	676	638	720	670	776	730
7					---	---	712	678	738	716	772	732
8					---	---	742	714	746	722	782	734
9					---	---	752	730	758	714	784	716
10					---	---	758	736	744	636	788	722
11					---	---	748	690	702	672	774	730
12					---	---	756	682	704	656	782	754
13					---	---	738	644	732	706	822	766
14					---	---	716	694	728	674	782	770
15					---	---	714	714	718	610	800	770
16					---	---	---	---	738	556	810	368
17					---	---	---	---	696	664	792	696
18					---	---	---	---	696	380	830	794
19					---	---	---	---	712	472	824	792
20					---	---	---	---	736	602	834	772
21					---	---	---	---	774	736	816	772
22					---	---	---	---	780	758	794	776
23					---	---	---	---	788	746	794	770
24					---	---	672	552	798	728	788	758
25					---	---	734	682	778	738	784	756
26					---	---	764	690	778	724	790	742
27					---	---	778	730	772	712	806	748
28					692	684	774	742	732	568	792	760
29					720	692	770	740	698	620	796	756
30					736	710	776	574	608	362	852	702
31					---	---	722	594	520	398	---	---
MONTH					736	684	778	524	798	220	852	368
YEAR	852	220										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03271075 GREAT MIAMI RIVER NEAR STEWART STREET AT DAYTON, OH--Continued

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1					---	---	8.8	8.1	8.8	8.1	8.3	8.1
2					---	---	8.3	8.0	8.8	8.1	8.2	8.1
3					---	---	8.0	7.9	8.4	7.7	8.3	8.1
4					---	---	8.1	7.9	8.0	7.8	8.6	8.2
5					---	---	8.0	7.9	8.3	8.0	8.7	8.2
6					---	---	8.2	7.9	8.3	8.1	8.8	8.2
7					---	---	8.4	8.0	8.4	8.1	8.8	8.2
8					---	---	8.5	8.0	8.5	8.1	8.9	8.2
9					---	---	8.5	8.1	8.8	8.2	8.9	8.2
10					---	---	8.7	8.2	8.7	8.2	8.9	8.2
11					---	---	8.8	8.3	8.8	8.2	8.8	8.2
12					---	---	8.8	8.2	8.6	8.2	8.6	8.1
13					---	---	8.7	8.2	8.7	8.1	8.5	8.1
14					---	---	8.9	8.1	8.7	8.1	8.5	8.0
15					---	---	8.5	8.5	8.9	8.1	8.7	8.1
16					---	---	---	---	8.8	7.9	8.6	7.9
17					---	---	---	---	8.9	8.2	8.5	8.0
18					---	---	---	---	8.7	8.0	8.5	8.0
19					---	---	---	---	8.7	8.1	8.8	8.0
20					---	---	---	---	8.7	8.1	8.9	8.1
21					---	---	---	---	8.6	8.1	8.8	8.1
22					---	---	---	---	8.7	8.0	8.7	8.2
23					---	---	---	---	8.8	8.1	8.7	8.2
24					---	---	8.0	7.8	8.9	8.1	8.8	8.2
25					---	---	8.3	7.7	8.8	8.1	8.9	8.4
26					---	---	8.5	7.8	8.7	8.2	8.9	8.5
27					---	---	8.5	7.9	8.8	8.1	8.9	8.5
28					8.9	8.5	8.5	7.9	8.6	7.9	8.9	8.5
29					8.9	8.1	8.6	8.0	8.3	7.9	8.8	8.3
30					8.9	8.1	8.3	7.9	8.0	7.8	8.6	8.1
31					---	---	8.8	7.9	8.3	7.9	---	---
MONTH					8.9	8.1	8.9	7.7	8.9	7.7	8.9	7.9
YEAR	8.9	7.7										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1					---	---	28.0	25.0	27.0	22.5	27.5	21.5
2					---	---	24.5	23.5	27.0	24.0	24.0	21.0
3					---	---	24.5	22.5	25.5	22.5	24.5	21.0
4					---	---	25.0	22.5	26.0	22.0	24.5	21.5
5					---	---	24.5	22.5	23.0	22.0	25.0	21.0
6					---	---	25.0	21.5	22.5	22.0	26.0	22.0
7					---	---	26.5	23.5	24.0	22.0	26.5	22.5
8					---	---	27.5	24.0	25.0	21.0	27.0	23.0
9					---	---	27.5	24.5	27.0	23.0	28.0	23.5
10					---	---	26.5	24.0	26.5	24.0	27.5	24.0
11					---	---	26.5	22.0	26.0	23.0	27.0	24.0
12					---	---	26.0	21.5	25.0	23.5	25.5	24.0
13					---	---	25.0	22.5	26.5	23.0	26.0	24.0
14					---	---	28.0	24.0	26.5	24.0	25.0	24.0
15					---	---	26.0	26.0	27.5	24.0	26.0	22.5
16					---	---	---	---	27.5	24.5	24.5	22.0
17					---	---	---	---	28.0	24.5	25.5	22.5
18					---	---	---	---	28.0	23.0	27.0	23.5
19					---	---	---	---	28.0	24.5	27.5	24.0
20					---	---	---	---	27.0	22.5	28.0	25.0
21					---	---	---	---	26.5	22.0	28.0	25.0
22					---	---	---	---	27.0	22.0	24.5	21.0
23					---	---	---	---	28.0	22.5	23.5	19.0
24					---	---	26.0	25.0	28.0	24.0	23.5	20.0
25					---	---	26.5	24.0	28.5	25.0	23.0	19.0
26					---	---	28.5	24.0	27.5	25.0	22.5	18.0
27					---	---	27.5	24.5	27.5	24.0	22.0	18.0
28					30.0	28.5	28.5	23.5	27.5	24.0	21.5	17.5
29					30.5	26.5	26.5	24.0	26.0	24.5	21.0	16.5
30					30.0	26.0	25.5	22.5	24.5	21.5	26.0	18.0
31					---	---	26.0	22.5	27.0	20.0	---	---
MONTH					30.5	26.0	28.5	21.5	28.5	20.0	28.0	16.5
YEAR	30.5	16.5										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03271075 GREAT MIAMI RIVER NEAR STEWART STREET AT DAYTON, OH--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1					---	---	13.5	4.1	15.1	5.0	7.4	6.7
2					---	---	7.7	4.1	14.5	4.5	8.0	6.5
3					---	---	7.1	5.4	7.0	5.1	9.0	6.4
4					---	---	7.2	6.2	7.6	6.9	11.3	6.2
5					---	---	7.2	6.6	9.4	6.7	13.2	6.3
6					---	---	7.6	6.3	9.2	6.8	14.0	5.9
7					---	---	8.0	5.8	10.5	6.7	14.2	5.6
8					---	---	8.8	5.5	11.4	6.8	15.2	5.3
9					---	---	9.7	5.3	13.9	6.6	16.3	5.1
10					---	---	10.6	5.2	11.9	5.8	14.8	4.7
11					---	---	14.8	5.7	15.5	6.4	13.6	4.4
12					---	---	18.1	7.1	11.6	5.8	9.9	4.2
13					---	---	13.3	6.3	13.9	5.8	9.7	4.1
14					---	---	15.1	5.6	13.5	5.4	8.4	3.9
15					---	---	7.2	7.2	15.1	4.9	12.0	4.1
16					---	---	---	---	11.9	5.0	7.7	4.2
17					---	---	---	---	13.7	5.6	9.7	4.7
18					---	---	---	---	11.4	5.1	12.0	4.5
19					---	---	---	---	11.7	4.6	14.8	5.5
20					---	---	---	---	13.0	4.6	16.5	5.5
21					---	---	---	---	12.4	4.8	16.1	5.5
22					---	---	---	---	13.4	4.5	15.9	6.3
23					---	---	---	---	15.2	4.5	16.3	7.4
24					---	---	7.8	5.1	14.6	4.5	16.9	7.2
25					---	---	10.4	4.2	14.6	4.2	17.5	7.6
26					---	---	11.9	4.8	12.9	4.2	18.3	7.9
27					---	---	11.7	4.2	14.0	4.4	17.6	8.0
28					15.6	7.2	12.5	4.3	9.6	4.7	18.3	7.8
29					15.2	4.3	13.2	4.5	7.7	4.8	19.0	8.1
30					14.6	4.2	7.9	4.5	6.9	5.5	15.4	4.6
31					---	---	15.5	5.0	7.5	6.8	---	---
MONTH					15.6	4.2	18.1	4.1	15.5	4.2	19.0	3.9
YEAR	19.0	3.9										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03271500 GREAT MIAMI RIVER AT MIAMISBURG, OH

LOCATION.--Lat 39°38'40", long 84°17'23", in sec. 31, R.6, T.1, Montgomery County, Hydrologic Unit 05080002, on left bank 600 ft (183 m) downstream from bridge on State Highway 725 at Miamisburg, 0.3 mi (0.5 km) downstream from Bear Creek, 3.2 mi (5.1 km) upstream from Crains Run, and at mile 66.4 (106.8 km).

DRAINAGE AREA.--2,711 mi² (7,021 km²).

PERIOD OF RECORD.--March 1916 to September 1920 (published as Miami River at Franklin 1916-17), August 1924 to September 1935 (published as Miami River near Miamisburg), October 1952 to current year (published as Miami River at Miamisburg 1952-62). Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 743: 1929(M). WSP 1385: 1926. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 678.60 ft (206.837 m) National Geodetic Vertical Datum of 1912. Mar. 16, 1916 to Sept. 30, 1920, nonrecording gage at site 6.7 mi (10.8 km) downstream at different datum. Aug. 29 to Sept. 16, 1924, nonrecording gage, and Sept. 17, 1924 to Sept. 30, 1935, water-stage recorder, at site 2.2 mi (3.5 km) downstream at datum 677.06 ft (206.368 m) National Geodetic Vertical Datum.

REMARKS.--Records good. Diurnal fluctuation caused by powerplant 0.4 mi (0.6 km) upstream from station. Flood flow regulated by retarding dams beginning in 1920 on Mad River 19 mi (31 km) upstream, on Stillwater River 23 mi (37 km) upstream, on Great Miami River 23 mi (37 km) upstream and on Loramie Creek 52 mi (84 km) upstream. Also see REMARKS for stations 03261500 and 03269500.

COOPERATION.--Gage-height charts, tapes, and 10 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--41 years, 2,357 ft³/s (66.75 m³/s), 11.81 in/yr (300 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 61,800 ft³/s (1,750 m³/s) Jan. 21, 22, 1959, gage height, 20.65 ft (6.294 m), in gage well, from graph based on gage readings; 21.3 ft (6.49 m), from outside floodmarks; minimum daily, 148 ft³/s (4.19 m³/s) Sept. 7, 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 26, 1913 reached a discharge of 257,000 ft³/s (7,280 m³/s), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 27,300 ft³/s (773 m³/s) Mar. 15, gage height, 13.94 ft (4.249 m); minimum daily, 501 ft³/s (14.2 m³/s) Nov. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1680	573	2670	1930	2410	992	5780	2940	1890	1090	658	2870
2	2590	573	3700	1760	2310	979	4960	2680	1740	1780	660	1940
3	2360	564	3370	1480	2160	1000	4270	2430	1590	2660	4320	1420
4	1410	555	2470	1350	1970	979	4040	2300	1460	3990	3100	1070
5	1000	530	3450	1500	1830	931	3800	2340	1410	2970	1690	931
6	921	501	3170	1550	1740	954	3920	2100	1380	2160	1190	797
7	800	538	2240	1690	1610	992	6790	1910	1570	1620	996	706
8	973	599	1570	3840	1560	995	7500	1860	1900	1310	1150	651
9	1010	599	1570	5110	1490	1090	5420	1970	1810	1180	1090	605
10	921	625	1180	3450	1420	1190	4370	1870	1550	1150	1070	574
11	973	625	1080	2690	1350	1340	4000	1830	1390	1060	1090	579
12	941	573	1130	2300	1320	1740	3550	1790	1460	955	1220	571
13	850	538	1660	2200	1320	2710	3140	2760	1510	983	923	549
14	772	616	12400	2000	1310	15300	2670	4450	1390	992	814	560
15	753	555	20700	1800	1260	25400	2420	5570	1550	996	877	557
16	697	661	19000	1700	1240	26300	2190	5160	1330	920	902	1220
17	688	706	16100	1600	1190	24800	2090	4760	1210	852	1220	716
18	679	616	15300	1500	1140	21900	2510	3750	1160	804	1200	608
19	679	670	15400	1500	1090	18800	4440	3060	2580	761	1060	614
20	670	652	14100	1400	1080	17000	8440	2720	2380	738	813	589
21	652	1190	11300	1400	1100	17500	11100	2580	2480	708	670	575
22	616	890	7110	1300	1090	20200	9240	2360	1860	663	651	546
23	599	753	4920	1300	1060	18700	6940	2570	1560	693	627	527
24	599	697	3980	1300	1060	16700	6080	5550	1380	1120	573	510
25	625	643	5070	1880	1030	13500	7550	6740	1200	878	607	533
26	820	616	5050	3850	1010	15500	10500	4750	1300	855	575	538
27	670	581	3540	2850	1000	16500	8640	3690	1160	723	589	545
28	625	607	2550	2960	1000	14900	5550	2900	1190	671	1140	534
29	590	607	2460	3090	---	11800	3960	2520	1130	677	1970	529
30	564	1110	2350	2880	---	8490	3330	2300	1040	855	2250	536
31	555	---	2110	2650	---	6750	---	2110	---	755	4050	---
TOTAL	28282	19563	192700	67810	39150	325932	159190	96320	46560	37569	39745	23500
MEAN	912	652	6216	2187	1398	10510	5306	3107	1552	1212	1282	783
MAX	2590	1190	20700	5110	2410	26300	11100	6740	2580	3990	4320	2870
MIN	555	501	1080	1300	1000	931	2090	1790	1040	663	573	510
CFSM	.34	.24	2.29	.81	.52	3.88	1.96	1.15	.57	.45	.47	.29
IN.	.39	.27	2.64	.93	.54	4.47	2.18	1.32	.84	.52	.55	.32

CAL YR 1977 TOTAL 581502 MEAN 1593 MAX 20700 MIN 270 CFSM .59 IN 7.98
WTR YR 1978 TOTAL 1076321 MEAN 2949 MAX 26300 MIN 501 CFSM 1.09 IN 14.77

03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH

LOCATION.--Lat 39°38'14", long 84°17'33", Montgomery County, Hydrologic Unit 05080002, on left bank at Miamisburg, 1.0 mi (1.6 km) downstream from Bear Creek, 0.6 mi (1.0 km) downstream from discharge station at Miamisburg, 0.65 mi (1.05 km) downstream from discharge station at Miamisburg, and at mile 65.75 (105.79 km).

DRAINAGE AREA.--2,713 mi² (7.027 km²).

PERIOD OF RECORD.--June 1978 to September 1978.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1978 to September 1978.
pH: June 1978 to September 1978.
WATER TEMPERATURES: June 1978 to September 1978.
DISSOLVED OXYGEN: June 1978 to September 1978.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. Dissolved oxygen concentrations listed as 20.0 mg/L represent concentrations of 20.0 mg/L or higher due to instrument limitations. See records of discharge for gaging station at Miamisburg (station 03271500).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 978 micromhos Sept. 20, 1978; minimum recorded 393 micromhos Aug. 3, 1978.
pH: Maximum recorded, 9.0 units Aug. 21, 1978; minimum recorded, 7.3 units July 3, 1978.
WATER TEMPERATURES: Maximum recorded, 33.0°C July 20, 22, 1978; minimum recorded, 19.0°C June 9, 13, 1978.
DISSOLVED OXYGEN: Maximum recorded, 20.0 mg/L or higher July 12, 1978; minimum recorded, 1.1 mg/L July 23, 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 978 micromhos Sept. 20; minimum recorded, 393 micromhos Aug. 3.
pH: Maximum recorded, 9.0 units Aug. 21; minimum recorded, 7.3 units July 3.
WATER TEMPERATURES: Maximum recorded, 33.0°C July 20, 22; minimum recorded, 19.0°C June 9, 13.
DISSOLVED OXYGEN: Maximum recorded, 20.0 mg/L or higher July 12; minimum recorded, 1.1 mg/L July 23.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1					840	798	---	---	852	783	663	564
2					---	---	---	---	915	843	744	669
3					---	---	630	597	849	393	768	732
4					---	---	675	591	528	402	813	762
5					876	807	678	627	669	537	861	780
6					861	816	744	672	792	675	909	813
7					843	765	786	726	819	762	867	831
8					801	483	816	777	876	789	879	840
9					777	681	816	795	873	783	951	828
10					813	753	825	804	897	756	885	804
11					855	777	819	795	801	609	894	819
12					801	672	816	744	774	531	939	837
13					759	684	906	744	804	717	963	867
14					798	756	849	774	891	798	930	879
15					819	792	804	753	882	753	909	891
16					882	816	858	732	801	756	897	618
17					846	816	837	747	798	723	756	606
18					846	753	834	777	792	666	879	765
19					801	645	825	780	762	708	918	879
20					681	612	843	792	714	648	978	894
21					702	639	849	807	822	711	957	888
22					765	684	861	837	867	831	921	885
23					807	762	873	786	891	861	912	885
24					813	792	828	654	924	876	903	882
25					810	672	795	702	912	876	909	870
26					777	714	888	798	897	876	966	864
27					810	765	840	816	882	858	915	873
28					804	765	855	822	861	714	906	882
29					795	783	879	846	762	666	915	873
30					---	---	852	696	717	540	936	879
31					---	---	783	744	558	483	---	---
MONTH					882	483	906	591	924	393	978	564
YEAR	978	393										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH--Continued

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1					8.3	8.2	---	---	8.4	7.7	8.2	8.0
2					---	---	---	---	8.2	7.7	8.2	8.2
3					---	---	7.7	7.3	7.9	7.5	8.3	8.1
4					---	---	8.0	7.7	7.8	7.7	8.4	8.3
5					8.3	8.1	7.9	7.8	7.9	7.7	8.5	8.3
6					8.4	8.1	7.9	7.8	7.9	7.8	8.6	8.2
7					8.2	7.9	7.9	7.8	8.1	7.7	8.9	8.1
8					8.4	7.9	8.1	7.8	8.2	7.9	8.9	8.1
9					8.3	8.0	8.1	7.9	8.5	8.0	8.8	8.1
10					8.3	7.9	8.2	7.9	8.6	8.0	8.6	8.2
11					8.5	7.9	8.7	8.0	8.6	8.0	8.5	8.1
12					8.4	8.2	9.0	8.0	8.4	8.0	8.2	8.0
13					8.3	7.8	8.6	7.8	8.4	8.0	8.1	8.0
14					8.6	8.0	9.0	7.8	8.7	8.1	8.1	7.9
15					8.5	8.1	8.7	7.9	8.6	8.0	8.1	7.9
16					8.4	8.0	8.9	7.9	8.5	7.9	8.2	8.0
17					8.5	8.1	8.7	8.0	8.7	8.0	8.2	7.9
18					8.5	8.1	8.7	7.9	8.5	8.0	8.2	8.0
19					8.3	7.8	8.3	7.9	8.4	7.9	8.2	8.0
20					7.8	7.6	8.2	7.8	8.6	7.9	8.5	8.0
21					7.9	7.7	8.2	7.6	9.0	8.1	8.7	8.1
22					8.0	7.8	8.2	7.8	8.4	7.9	8.6	8.2
23					8.2	7.9	8.1	7.9	8.5	7.9	8.5	8.2
24					8.4	7.8	8.0	7.6	8.3	8.0	8.4	8.3
25					8.5	8.1	7.7	7.5	8.4	8.0	8.6	8.3
26					8.6	8.1	8.0	7.7	8.3	7.9	8.6	8.3
27					8.7	8.1	8.1	7.7	8.3	7.9	8.7	8.4
28					8.6	7.8	8.4	7.7	8.5	8.1	8.8	8.4
29					8.5	7.9	8.2	7.7	8.2	8.0	8.9	8.4
30					---	---	7.9	7.7	8.2	7.8	8.6	8.3
31					---	---	7.8	7.6	8.1	7.8	---	---
MONTH					8.7	7.6	9.0	7.3	9.0	7.5	8.9	7.9
YEAR	9.0	7.3										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1					26.0	25.0	---	---	29.0	24.5	23.5	20.0
2					---	---	---	---	31.0	27.0	25.0	21.0
3					---	---	23.5	22.0	28.0	24.0	25.5	21.5
4					---	---	23.5	21.0	24.5	21.5	26.0	22.5
5					23.5	21.5	23.0	21.0	23.5	22.5	27.0	21.5
6					23.5	20.0	25.5	21.0	23.5	22.5	28.0	23.0
7					23.0	21.5	27.5	23.5	24.0	22.0	29.0	24.0
8					23.5	21.5	28.5	24.5	25.5	22.0	30.5	26.0
9					24.0	19.0	28.0	24.5	27.5	23.5	30.5	26.0
10					25.0	20.5	28.0	25.5	28.0	25.0	31.5	27.5
11					26.5	21.0	27.5	23.0	26.5	24.0	30.5	27.5
12					25.0	22.5	26.5	22.0	26.5	23.0	29.0	27.5
13					23.0	19.0	26.0	23.0	28.5	24.0	30.0	27.0
14					24.0	20.0	29.0	24.5	29.0	25.0	29.0	27.0
15					22.5	21.0	27.0	24.5	30.0	26.0	29.0	25.5
16					24.0	20.5	28.0	24.5	30.0	26.5	27.5	22.5
17					25.5	22.0	29.0	23.0	30.0	26.5	27.0	23.0
18					27.0	23.0	30.0	25.0	26.5	26.5	30.0	25.5
19					26.5	23.5	31.5	25.5	30.5	27.0	31.0	27.5
20					26.0	22.5	33.0	27.5	28.0	23.5	31.0	27.0
21					25.5	23.5	32.0	29.0	27.5	22.0	32.0	28.5
22					25.5	22.0	33.0	29.0	28.5	23.5	29.0	24.0
23					26.5	22.0	32.0	29.0	30.5	25.5	24.5	20.5
24					27.0	23.0	28.5	25.5	31.5	27.0	25.5	22.0
25					26.5	23.5	28.0	25.5	31.0	27.5	24.5	21.0
26					27.5	23.5	30.5	26.5	31.0	28.5	25.0	20.5
27					31.5	26.5	30.0	27.0	30.5	27.5	24.5	21.0
28					32.5	28.0	31.0	26.0	30.0	26.5	23.5	21.0
29					32.0	28.0	29.0	26.0	28.0	26.5	23.5	19.5
30					---	---	26.5	23.0	26.0	22.0	22.0	20.5
31					---	---	27.0	23.0	22.0	20.0	---	---
MONTH					32.5	19.0	33.0	21.0	31.5	20.0	32.0	19.5
YEAR	33.0	19.0										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1					8.3	5.7	---	---	10.7	2.2	6.4	6.0
2					---	---	---	---	8.9	1.7	6.3	5.7
3					---	---	5.0	4.5	6.0	2.5	6.6	5.5
4					---	---	5.7	4.8	6.0	4.5	6.3	5.1
5					6.9	4.7	5.1	4.5	4.4	3.0	8.1	5.3
6					6.7	3.9	5.1	4.2	3.9	1.9	9.5	5.7
7					5.3	3.5	4.7	3.5	5.8	3.2	13.0	4.7
8					7.3	3.4	4.9	3.2	7.5	4.2	13.3	3.6
9					4.4	1.2	4.9	3.1	9.6	4.4	13.5	3.6
10					---	---	6.1	3.1	8.8	3.7	11.0	3.6
11					---	---	11.9	4.0	9.9	4.4	9.8	3.0
12					---	---	20.0	6.0	7.8	4.6	4.6	1.9
13					---	---	15.4	5.6	7.9	4.0	3.8	2.3
14					---	---	17.4	3.6	9.4	4.6	3.5	2.2
15					10.1	6.5	13.2	5.0	11.8	4.3	4.1	2.1
16					9.2	5.0	15.1	4.3	7.7	3.0	---	---
17					9.2	4.2	11.3	4.7	10.5	3.6	---	---
18					8.0	4.1	13.6	3.4	7.1	3.8	---	---
19					6.4	4.4	14.9	3.0	7.4	2.8	6.2	3.6
20					5.3	4.5	14.3	2.6	9.2	2.7	7.9	2.8
21					5.3	4.5	7.8	1.9	13.8	4.0	9.5	2.6
22					6.6	4.6	4.5	1.2	6.5	3.0	6.5	2.4
23					7.4	4.7	3.5	1.1	---	---	7.0	3.4
24					8.7	4.6	3.2	1.7	---	---	5.9	4.2
25					8.8	5.0	3.6	2.2	---	---	7.3	4.2
26					10.8	4.4	7.0	2.2	---	---	7.2	4.1
27					11.6	3.6	6.5	2.1	---	---	8.6	4.0
28					11.6	3.4	11.2	1.6	---	---	8.7	3.9
29					12.0	3.7	6.4	1.8	6.4	2.8	8.2	4.4
30					---	---	4.0	2.5	5.3	4.4	6.0	3.5
31					---	---	6.0	2.6	6.2	3.9	---	---
MONTH					12.0	1.2	20.0	1.1	13.8	1.7	13.5	1.9
YEAR	20.0	1.1										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03271600 GREAT MIAMI RIVER NEAR MIAMISBURG, OH

LOCATION.--Lat 39°36'39", long 84°17'28", Montgomery County, Hydrologic Unit 05080002, on Chautauqua Road bridge, about 2.0 mi (3.2 km) south of Miamisburg, 2.5 mi (4.0 km) downstream from discharge station at Miamisburg and at mile 63.9 (102.8 km).

DRAINAGE AREA.--2,715 mi² (7,032 km²).

PERIOD OF RECORD.--Water year 1962 to 1978 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: March 1964 to June 1, 1978 (discontinued).
pH: March 1964 to June 1, 1978 (discontinued).
WATER TEMPERATURES: March 1964 to June 1, 1978 (discontinued).
DISSOLVED OXYGEN: March 1964 to June 1, 1978 (discontinued).

INSTRUMENTATION.--Water-quality monitor, since March 1964. Prior to November 1971, at site 400 ft (122 m) downstream, in G. H. Hutchings powerplant.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. Dissolved oxygen concentrations listed as 15.0 mg/L represent concentrations of 15.0 mg/L or higher due to instrument limitations prior to March 29, 1978; 20.0 mg/L limitation thereafter. See records of daily discharge for station at Miamisburg (station 03271500).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,350 micromhos Feb. 12, 1977; minimum, 219 micromhos June 22, 1974.
pH: Maximum, 9.3 units May 19, 20, 1971; minimum, 5.7 units Feb. 9, 1972.
WATER TEMPERATURES: Maximum, 42.5°C July 15, 1977; minimum, 0.0°C on several days during winter periods.
DISSOLVED OXYGEN: Maximum, 15.9 mg/L Apr. 19, 1978; minimum, 0.0 mg/L on many days during 1964-66, 1970-71, 1974-75, 1977.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,160 micromhos Jan. 26; minimum recorded, 300 micromhos Mar. 16.
pH: Maximum recorded, 8.7 units May 11; minimum recorded, 7.1 units Apr. 22.
WATER TEMPERATURES: Maximum recorded, 27.0°C June 1; minimum recorded, 0.0°C Dec. 26, Jan. 9, 26, Feb. 6, Mar. 15.
DISSOLVED OXYGEN: Maximum recorded, 15.9 mg/L Apr 19; minimum recorded, 0.9 mg/L Nov. 8.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1040	471	993	963	831	708	840	792	---	---	957	909
2	588	468	993	972	768	723	864	822	---	---	927	906
3	633	552	1010	969	771	744	858	816	798	780	927	909
4	666	588	1010	972	771	756	870	852	804	786	1060	933
5	741	675	1030	993	774	657	885	849	804	798	996	945
6	780	744	1030	984	828	675	960	885	822	798	969	930
7	783	732	1010	969	876	807	921	840	840	819	981	942
8	825	780	978	942	879	825	864	681	849	828	984	936
9	765	663	963	936	1100	891	720	678	858	840	1020	969
10	783	723	951	906	1040	921	---	---	888	858	1130	1010
11	828	780	924	903	942	918	---	---	900	873	1050	993
12	822	795	909	897	936	921	---	---	888	867	1040	936
13	855	810	936	885	1130	927	---	---	915	873	930	753
14	891	837	945	897	1080	516	---	---	924	885	741	384
15	924	882	969	915	537	456	---	---	954	915	375	306
16	909	879	966	897	---	---	831	810	930	888	321	300
17	927	870	897	828	537	501	834	810	930	894	348	312
18	945	897	882	831	558	537	849	828	951	888	375	348
19	942	924	900	873	549	492	879	849	903	879	408	378
20	948	909	921	894	492	474	858	834	900	885	453	390
21	957	918	915	705	567	489	873	840	906	879	468	438
22	990	954	810	687	651	570	849	831	951	891	432	405
23	966	945	861	816	696	654	855	825	918	897	426	411
24	975	933	891	846	714	696	867	855	915	900	462	426
25	1000	939	873	846	702	666	1080	867	936	906	522	465
26	957	849	912	855	675	651	1160	1020	924	891	522	468
27	867	804	894	861	711	678	---	---	909	891	474	456
28	951	870	972	861	---	---	---	---	924	909	525	462
29	978	936	1070	990	---	---	---	---	---	---	561	519
30	963	933	1020	837	795	756	---	---	---	---	585	546
31	993	948	---	---	798	789	---	---	---	---	633	582
MONTH	1040	468	1070	687	1130	456	1160	678	954	780	1130	300

03271600 GREAT MIAMI RIVER NEAR MIAMISBURG, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	654	627	756	723	804	783						
2	654	636	774	735	---	---						
3	693	651	780	753	---	---						
4	687	675	786	762	---	---						
5	708	666	783	750	---	---						
6	708	690	789	774	---	---						
7	699	618	798	774	---	---						
8	609	573	828	795	---	---						
9	642	585	825	792	---	---						
10	696	645	813	798	---	---						
11	696	678	825	792	---	---						
12	729	693	825	795	---	---						
13	741	723	810	678	---	---						
14	768	732	711	675	---	---						
15	765	744	693	657	---	---						
16	768	747	678	648	---	---						
17	780	750	696	672	---	---						
18	774	690	720	687	---	---						
19	711	684	747	720	---	---						
20	681	504	753	732	---	---						
21	543	480	747	711	---	---						
22	588	534	762	732	---	---						
23	588	558	756	717	---	---						
24	639	588	717	546	---	---						
25	645	579	669	534	---	---						
26	585	549	---	---	---	---						
27	597	546	726	702	---	---						
28	681	600	753	723	---	---						
29	717	675	771	744	---	---						
30	738	708	780	753	---	---						
31	---	---	798	753	---	---						
MONTH	780	480	828	534	804	783						
YEAR	1160	300										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

GREAT MIAMI RIVER BASIN

03271600 GREAT MIAMI RIVER NEAR MIAMISBURG, OH--Continued

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.0	7.8	---	---	---	---	8.2	8.1	---	---	8.0	7.7
2	8.1	7.8	7.9	7.9	---	---	8.3	8.2	---	---	7.9	7.7
3	8.2	7.8	8.0	7.9	---	---	8.2	8.0	8.1	7.7	8.1	7.7
4	7.9	7.8	7.9	7.8	---	---	8.1	7.9	8.1	8.0	8.1	7.7
5	7.9	7.7	7.9	7.8	---	---	8.1	8.1	8.0	7.9	8.2	7.7
6	7.9	7.8	7.9	7.8	---	---	8.1	7.7	7.9	7.6	8.3	7.8
7	---	---	7.9	7.8	---	---	8.1	7.9	7.9	7.7	8.1	7.7
8	8.0	7.8	7.8	7.7	---	---	8.0	7.7	7.9	7.7	8.1	7.6
9	8.0	7.7	7.8	7.7	---	---	8.1	7.9	7.9	7.7	8.2	7.7
10	7.9	7.6	---	---	---	---	---	---	7.9	7.6	8.1	7.8
11	8.0	7.6	---	---	---	---	---	---	7.9	7.7	8.1	7.8
12	8.1	7.9	8.1	8.0	---	---	---	---	7.9	7.6	7.9	7.5
13	8.1	7.9	8.1	7.7	---	---	---	---	7.8	7.6	7.9	7.8
14	8.1	7.6	8.1	7.6	---	---	---	---	7.9	7.6	7.9	7.6
15	8.1	7.9	8.0	7.7	---	---	---	---	7.9	7.6	7.7	7.5
16	8.1	7.9	8.1	7.9	---	---	8.1	8.0	7.8	7.5	7.6	7.5
17	8.0	7.9	8.0	7.9	8.2	8.0	8.2	8.1	7.8	7.6	7.6	7.4
18	8.0	7.8	8.0	7.9	8.1	8.0	8.2	8.1	7.9	7.4	---	---
19	8.0	7.8	8.1	7.9	8.1	7.9	8.2	8.0	7.9	7.6	---	---
20	8.0	7.8	8.1	7.9	8.1	7.7	8.1	8.0	7.9	7.6	7.7	7.5
21	7.9	7.6	8.2	7.9	7.8	7.5	8.1	7.9	7.9	7.6	7.8	7.7
22	7.8	7.8	8.0	7.8	7.8	7.7	8.1	7.8	7.9	7.6	7.7	7.6
23	7.9	7.8	8.0	7.9	8.2	7.8	8.0	7.7	7.9	7.6	7.8	7.7
24	7.9	7.7	8.1	7.9	8.2	7.9	8.0	7.9	7.9	7.6	7.8	7.7
25	7.9	7.8	8.1	8.0	8.2	7.8	8.0	7.7	7.9	7.7	7.8	7.8
26	7.9	7.8	8.1	7.8	7.9	7.6	8.1	7.9	8.0	7.6	7.8	7.7
27	7.8	7.6	8.1	7.9	8.2	7.8	---	---	8.1	7.7	7.7	7.7
28	7.8	7.7	8.0	7.9	---	---	---	---	8.0	7.7	7.8	7.7
29	7.8	7.8	8.0	7.8	8.1	8.0	---	---	---	---	7.9	7.8
30	7.9	7.8	8.0	7.8	8.2	7.6	---	---	---	---	7.9	7.8
31	7.9	7.8	---	---	8.2	8.2	---	---	---	---	8.0	7.8
MONTH	8.2	7.6	8.2	7.6	8.2	7.5	8.3	7.7	8.1	7.4	8.3	7.4

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.1	8.0	8.3	8.2	8.5	8.3						
2	8.1	8.0	8.3	8.2	---	---						
3	8.0	7.9	8.3	8.1	---	---						
4	8.1	7.9	8.3	8.1	---	---						
5	8.1	7.9	8.2	8.0	---	---						
6	8.1	8.0	8.3	8.0	---	---						
7	8.1	7.9	8.3	8.2	---	---						
8	8.0	7.9	8.2	8.0	---	---						
9	8.1	8.0	8.3	8.0	---	---						
10	8.1	7.8	8.5	8.2	---	---						
11	8.0	7.8	8.7	8.2	---	---						
12	8.1	7.8	8.5	8.1	---	---						
13	8.3	8.1	8.3	8.1	---	---						
14	8.3	8.1	8.1	8.1	---	---						
15	8.4	8.1	8.1	7.9	---	---						
16	8.5	8.2	8.1	7.9	---	---						
17	8.5	8.2	8.1	7.9	---	---						
18	8.4	8.2	8.3	8.1	---	---						
19	8.2	8.1	8.4	8.1	---	---						
20	8.2	7.8	8.4	8.2	---	---						
21	7.9	7.8	8.4	8.1	---	---						
22	7.9	7.1	8.5	8.2	---	---						
23	8.0	7.9	8.3	8.1	---	---						
24	8.2	8.0	8.1	7.9	---	---						
25	8.2	8.0	8.1	7.9	---	---						
26	8.1	8.0	---	---	---	---						
27	8.1	8.0	8.3	7.7	---	---						
28	8.2	8.0	8.4	8.2	---	---						
29	8.2	8.1	8.6	8.3	---	---						
30	8.3	8.1	8.6	8.4	---	---						
31	---	---	8.6	8.4	---	---						
MONTH	8.5	7.1	8.7	7.7	8.5	8.3						
YEAR	8.7	7.1										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03271600 GREAT MIAMI RIVER NEAR MIAMISBURG, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	26.0	19.5	17.5	15.5	9.0	7.5	3.5	3.0	---	---	6.0	5.0
2	19.0	16.5	18.0	16.5	7.5	6.0	3.0	1.5	---	---	5.0	3.5
3	16.5	15.0	19.0	17.5	6.0	5.5	2.5	1.0	2.0	1.5	4.5	3.0
4	17.5	14.5	19.5	18.5	6.0	5.0	3.5	1.5	2.0	.5	5.0	3.0
5	17.5	15.0	19.5	18.0	5.0	4.0	4.5	3.5	2.0	1.0	5.0	3.5
6	18.0	16.0	19.5	19.0	5.0	2.0	5.5	4.5	1.5	.0	7.0	4.0
7	16.0	14.5	19.5	19.0	2.0	1.0	6.0	5.0	2.0	.5	7.0	4.5
8	15.0	14.0	21.0	19.5	4.0	2.0	6.5	3.5	3.0	.5	5.5	4.5
9	15.0	13.0	20.0	19.0	4.0	1.0	3.0	.0	3.0	1.5	7.0	5.0
10	14.5	12.5	19.0	12.5	1.5	.5	---	---	4.0	2.5	8.5	6.0
11	14.0	12.0	12.0	9.5	2.5	1.0	---	---	3.5	2.5	7.0	5.5
12	12.5	11.5	9.0	7.0	3.5	2.0	---	---	4.0	1.5	5.5	3.5
13	13.5	11.5	8.5	7.0	5.0	3.5	---	---	4.5	3.5	5.0	3.0
14	13.5	11.0	8.0	6.5	4.5	1.0	---	---	4.5	3.0	3.5	.5
15	13.0	11.5	10.5	8.0	1.5	1.0	---	---	5.0	3.0	1.0	.0
16	13.0	12.0	12.0	10.0	---	---	---	---	5.0	3.5	1.5	.5
17	12.0	10.5	12.0	10.0	4.0	2.5	2.5	.5	4.5	3.0	1.5	.0
18	14.0	12.0	10.0	9.0	5.5	4.0	4.0	2.0	5.0	3.0	3.0	1.5
19	13.5	12.5	11.0	8.5	6.0	5.0	4.0	3.0	3.0	1.5	4.0	1.0
20	14.5	12.5	11.0	9.5	5.5	3.0	3.5	2.5	3.5	.5	3.5	.5
21	16.0	13.5	11.5	10.0	3.0	1.5	3.5	2.0	4.0	3.0	3.5	2.5
22	18.0	15.0	9.5	9.0	2.5	.5	2.5	1.5	5.0	3.0	4.5	1.5
23	17.0	16.0	10.0	8.5	3.5	2.0	3.0	.5	5.0	3.5	4.0	3.5
24	17.0	15.0	10.0	8.5	4.5	3.0	3.5	2.0	5.5	4.0	3.5	2.5
25	17.0	16.0	8.5	6.5	3.0	2.0	4.0	3.5	6.0	4.0	3.0	2.0
26	18.0	17.0	6.5	4.5	2.0	.0	3.5	.0	5.0	3.5	3.0	2.5
27	18.5	16.5	4.5	3.0	1.0	.5	---	---	5.0	2.5	3.0	2.5
28	18.0	17.0	6.0	3.5	---	---	---	---	6.5	5.0	5.5	2.0
29	17.5	16.0	8.0	6.0	---	---	---	---	---	---	7.0	4.5
30	16.5	14.5	8.0	7.0	3.0	1.0	---	---	---	---	8.0	5.0
31	16.0	15.0	---	---	3.5	2.5	---	---	---	---	10.5	6.5
MONTH	26.0	10.5	21.0	3.0	9.0	.0	6.5	.0	6.5	.0	10.5	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	12.5	9.5	14.5	12.5	27.0	24.0						
2	11.5	9.5	16.0	13.0	---	---						
3	12.0	8.5	16.5	13.5	---	---						
4	12.0	11.0	15.0	12.5	---	---						
5	13.0	10.5	12.5	12.0	---	---						
6	12.5	11.5	13.0	11.0	---	---						
7	13.5	11.0	12.5	11.5	---	---						
8	12.5	11.0	15.0	12.0	---	---						
9	13.0	10.0	16.5	14.5	---	---						
10	15.0	11.5	17.5	14.5	---	---						
11	15.0	13.5	18.5	15.0	---	---						
12	15.5	12.0	17.5	16.5	---	---						
13	15.0	13.5	17.0	15.0	---	---						
14	14.5	12.5	15.0	12.5	---	---						
15	14.5	12.5	13.5	12.0	---	---						
16	13.0	11.5	13.5	12.5	---	---						
17	14.0	11.0	16.0	12.5	---	---						
18	14.0	12.5	19.0	14.5	---	---						
19	13.0	11.0	21.5	17.5	---	---						
20	10.5	8.0	22.0	19.5	---	---						
21	8.5	7.0	21.0	18.5	---	---						
22	12.0	8.0	20.0	17.0	---	---						
23	8.5	8.0	19.0	18.0	---	---						
24	11.5	8.0	18.5	17.5	---	---						
25	11.0	9.5	19.5	16.0	---	---						
26	11.0	8.5	---	---	---	---						
27	13.0	9.0	24.0	19.5	---	---						
28	14.5	10.5	25.0	21.5	---	---						
29	15.0	12.5	26.0	22.5	---	---						
30	16.0	13.0	26.5	24.0	---	---						
31	---	---	26.0	23.0	---	---						
MONTH	16.0	7.0	26.5	11.0	27.0	24.0						
YEAR	27.0	.0										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03271600 GREAT MIAMI RIVER NEAR MIAMISBURG, OH--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	5.4	1.5	4.4	3.6	10.7	10.1	12.4	12.2	---	---	10.9	6.9
2	7.6	5.4	4.4	3.3	11.7	10.3	12.8	12.1	---	---	11.4	8.6
3	8.3	7.7	4.3	3.1	12.1	11.6	12.9	12.5	11.9	11.4	11.8	8.7
4	8.5	7.5	3.3	2.0	11.9	11.4	12.7	12.3	12.0	11.2	12.7	8.7
5	7.7	6.7	3.0	1.7	12.3	11.7	12.3	12.0	11.6	11.0	13.1	8.6
6	7.2	6.3	2.8	1.7	12.9	12.1	12.0	11.7	11.8	11.0	13.3	9.7
7	6.6	5.9	2.5	1.7	13.7	12.9	11.7	11.4	11.6	10.5	11.5	6.7
8	7.0	6.4	1.8	.9	13.5	12.9	12.0	11.6	11.7	10.7	10.4	6.7
9	7.1	6.3	2.8	1.3	13.4	12.6	12.8	11.9	11.6	10.2	11.8	6.4
10	7.7	6.5	4.3	2.6	13.7	13.2	---	---	11.2	9.7	10.0	6.4
11	7.7	6.6	7.7	4.4	13.8	13.0	---	---	11.3	9.4	9.4	6.4
12	8.6	7.2	8.4	7.6	13.6	12.8	---	---	11.5	9.9	9.0	7.6
13	8.5	7.7	9.8	8.0	13.0	12.4	---	---	11.0	9.1	10.6	9.0
14	7.9	6.0	9.8	8.5	12.5	12.1	---	---	11.2	8.4	12.4	10.7
15	7.0	5.0	---	---	13.3	12.6	---	---	11.4	8.8	13.0	12.5
16	6.8	5.7	---	---	---	---	12.2	11.8	10.8	8.9	12.9	12.8
17	6.9	6.0	---	---	13.4	12.9	12.0	11.5	12.2	8.5	12.9	12.7
18	6.9	5.4	---	---	13.0	12.6	12.0	11.5	12.6	9.6	13.1	12.8
19	7.2	3.8	7.6	6.4	13.0	12.0	11.9	11.4	12.6	10.2	12.8	12.6
20	---	---	7.8	5.8	13.1	11.9	11.9	11.4	12.2	10.7	12.6	12.0
21	5.3	4.6	8.9	7.2	12.5	12.3	12.1	11.2	12.2	9.2	12.3	11.7
22	---	---	8.7	8.0	12.9	12.5	12.0	11.5	11.6	8.4	12.5	12.1
23	---	---	8.6	8.0	13.1	12.9	11.9	11.3	10.9	7.7	12.2	11.8
24	4.5	3.5	8.9	7.8	13.0	11.8	11.7	10.6	10.6	7.4	12.0	11.8
25	4.6	2.8	9.2	8.6	12.0	11.4	10.9	10.1	11.2	7.4	12.2	11.9
26	3.8	2.9	9.8	8.9	13.1	11.9	11.3	10.1	12.5	8.5	12.0	11.8
27	3.4	2.2	10.7	9.7	13.1	12.8	---	---	12.6	9.2	12.1	11.9
28	---	---	11.5	10.2	---	---	---	---	11.2	7.9	12.2	11.7
29	2.9	2.1	11.3	9.3	13.1	12.7	---	---	---	---	11.6	11.0
30	3.8	2.9	10.6	9.4	13.0	12.6	---	---	---	---	11.1	10.6
31	4.5	3.1	---	---	12.8	12.5	---	---	---	---	10.7	10.0
MONTH	8.6	1.5	11.5	.9	13.8	10.1	12.9	10.1	12.6	7.4	13.3	6.4

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.0	9.3	---	---	7.8	4.8						
2	9.9	9.2	---	---	---	---						
3	10.0	8.8	---	---	---	---						
4	9.5	8.7	8.7	7.8	---	---						
5	9.4	8.2	9.5	7.4	---	---						
6	8.9	7.9	12.1	8.0	---	---						
7	8.5	7.9	10.9	9.1	---	---						
8	8.8	8.2	10.6	9.1	---	---						
9	8.7	8.1	10.3	7.9	---	---						
10	8.1	7.0	12.4	6.8	---	---						
11	---	---	12.8	7.2	---	---						
12	---	---	9.8	6.7	---	---						
13	---	---	8.5	6.2	---	---						
14	---	---	9.7	8.0	---	---						
15	---	---	10.0	9.4	---	---						
16	---	---	9.7	7.8	---	---						
17	14.2	10.9	10.2	9.5	---	---						
18	15.0	11.3	9.7	7.7	---	---						
19	15.9	12.6	8.7	8.1	---	---						
20	---	---	8.8	5.8	---	---						
21	---	---	7.8	4.8	---	---						
22	---	---	9.9	6.3	---	---						
23	---	---	8.1	6.1	---	---						
24	---	---	7.4	6.2	---	---						
25	---	---	8.1	7.3	---	---						
26	---	---	---	---	---	---						
27	---	---	7.5	5.9	---	---						
28	---	---	8.0	6.0	---	---						
29	---	---	7.3	5.5	---	---						
30	---	---	6.3	4.2	---	---						
31	---	---	9.2	3.7	---	---						
MONTH	15.9	7.0	12.8	3.7	7.8	4.8						
YEAR	15.9	.9										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03271800 TWIN CREEK NEAR INGOMAR, OH

LOCATION.--Lat 39°42'28", long 84°31'30", in sec. 15, T.5 N., R.3 E., Preble County, Hydrologic Unit 05080002, on left bank at downstream side of bridge on Halderman Road, 0.5 mi (0.8 km) downstream from Bantas Fork, 1.4 mi (2.3 km) west of Ingomar, and 4.8 mi (7.7 km) upstream from Aukerman Creek.

DRAINAGE AREA.--197 mi² (510 km²).

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1959, 1961-62, October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 815.42 ft (248.540 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Sediment data collected at this site 1970 to 1974.

COOPERATION.--Gage-height tapes and 9 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--16 years, 181 ft³/s (5.126 m³/s), 12.48 in/yr (317 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,300 ft³/s (547 m³/s) Mar. 4, 1963, gage height, 14.40 ft (4.389 m), from rating curve extended above 7,000 ft³/s (198 m³/s) on basis of contracted-opening measurement at gage height 18.8 ft (5.73 m); minimum daily, 2.5 ft³/s (0.071 m³/s) Sept. 12-14, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959 reached a stage of 18.8 ft (5.73 m), discharge, 30,300 ft³/s (858 m³/s), computed by Miami Conservancy District. Flood of Mar. 25, 1913 reached a stage of 28.0 ft (8.53 m).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,700 ft³/s (133 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 14	0730	6850	194	8.84	2.694	Mar. 14	1715	*7570	214	*9.34	2.847
Dec. 18	0830	4730	134	7.25	2.210						

Minimum, 5.1 ft³/s (0.14 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	20	1300	66	110	26	257	161	109	50	18	150
2	97	19	558	61	100	26	202	138	100	87	18	74
3	43	18	294	56	90	25	178	123	90	102	146	46
4	25	17	228	52	80	25	176	123	81	81	59	33
5	19	16	595	50	70	25	162	127	76	58	43	27
6	16	16	542	54	64	25	188	103	72	54	30	24
7	14	18	234	130	60	25	414	93	78	45	25	21
8	19	27	186	693	56	26	277	99	88	40	23	19
9	40	32	178	326	52	27	216	104	71	36	21	18
10	52	34	139	165	49	32	192	94	61	32	22	16
11	38	45	130	130	46	50	185	85	55	29	19	15
12	27	37	118	110	44	105	158	88	60	27	18	15
13	23	29	297	92	42	462	138	309	85	29	17	15
14	20	26	5490	82	40	5680	117	503	63	30	17	16
15	18	24	2380	74	38	4460	105	593	53	29	20	15
16	16	28	1200	66	37	2430	101	376	51	25	18	57
17	14	50	874	62	36	1700	96	341	48	23	19	71
18	14	68	3250	56	35	1020	132	260	52	21	19	29
19	14	49	1390	54	34	1120	167	203	320	19	20	21
20	14	39	796	52	33	1330	300	175	270	18	17	18
21	14	75	486	50	32	2100	267	174	290	18	14	16
22	14	104	297	54	31	1340	195	146	120	17	13	14
23	12	72	217	60	30	1090	185	254	91	16	13	12
24	11	58	246	66	29	994	336	2120	75	24	12	12
25	13	48	893	90	28	1010	1050	770	68	28	11	11
26	26	41	323	290	27	2510	1180	393	78	23	12	11
27	36	36	197	240	27	1070	494	260	63	20	14	11
28	31	34	150	200	26	677	299	204	52	19	26	11
29	26	30	125	170	---	502	228	169	66	18	24	10
30	23	108	106	140	---	356	191	145	50	21	81	11
31	21	---	84	120	---	294	---	127	---	20	338	---
TOTAL	822	1218	23305	3911	1366	30552	8186	8860	2836	1059	1147	819
MEAN	26.5	40.6	752	126	48.1	986	273	286	94.5	34.2	37.0	27.3
MAX	97	108	5490	693	110	5680	1180	2120	320	102	338	150
MIN	11	16	84	50	26	25	96	85	48	16	11	10
CFSM	.14	.21	3.82	.64	.24	5.01	1.39	1.45	.48	.17	.19	.14
IN.	.16	.23	4.40	.74	.25	5.77	1.55	1.67	.54	.20	.22	.15

CAL YR 1977 TOTAL 55395.4 MEAN 152 MAX 5490 MIN 5.6 CFSM .77 IN 10.46
WTR YR 1978 TOTAL 84071.0 MEAN 230 MAX 5680 MIN 10 CFSM 1.17 IN 15.88

03272000 TWIN CREEK NEAR GERMANTOWN, OH

LOCATION.--Lat 39°38'10", long 84°23'48", in NW 1/4 sec. 11, T.3 N., R.4 E., Montgomery County, Hydrologic Unit 05080002, on right bank 0.3 mi (0.5 km) downstream from Germantown Dam, 1.5 mi (2.4 km) northwest of Germantown, and 3 mi (5 km) upstream from Little Twin Creek. DRAINAGE AREA.--275 mi² (712 km²).

PERIOD OF RECORD.--April 1914 to December 1923, December 1926 to current year.

REVISED RECORDS.--WSP 403: 1914(M). WSP 1385: 1915(M).

GAGE.--Water-stage recorder. Datum of gage is 700.24 ft (213.433 m) National Geodetic Vertical Datum of 1912. Prior to Dec. 18, 1926, nonrecording gage at site 1 mi (2 km) downstream at datum 12.49 ft (3.807 m) higher.

REMARKS.--Records good except those for winter periods and subsequent to July 25, which are fair. Flood flow regulated by Germantown retarding basin, 0.3 mi (0.5 km) upstream beginning in 1920.

COOPERATION.--Gage-height tapes, and 9 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--60 years (1914-23, 1927-78), 259 ft³/s (7.335 m³/s), 12.79 in/yr 325 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,390 ft³/s (266 m³/s) July 8, 1915, gage height 11.7 ft (3.57 m), from graph based on gage readings, site and datum then in use; maximum gage height, 29.19 ft (8.897 m) Jan. 22, 1959; minimum discharge, 1.5 ft³/s (0.042 m³/s) Sept. 25, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 25, 1913 reached a stage of 18.3 ft (5.58 m), original site and datum, discharge, 66,000 ft³/s (1,870 m³/s), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,530 ft³/s (185 m³/s) Mar. 15, gage height, 27.00 ft (8.230 m); minimum, 5.8 ft³/s (0.16 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	33	1360	150	240	80	372	227	140	74	28	350
2	119	31	730	140	220	77	300	194	128	224	28	150
3	70	29	401	130	210	74	255	173	120	165	270	86
4	45	28	320	120	190	72	246	170	107	126	76	58
5	32	27	690	110	180	70	230	175	100	89	50	45
6	26	27	826	110	170	68	241	151	94	73	40	37
7	22	32	380	120	160	66	479	134	98	62	35	34
8	34	36	344	515	150	66	389	138	108	57	32	31
9	47	45	287	1010	140	66	299	149	96	50	30	28
10	59	54	225	430	140	74	260	132	82	47	32	25
11	56	59	575	260	130	103	254	118	74	44	28	23
12	43	58	700	230	130	213	225	120	76	40	26	23
13	35	50	343	200	130	723	193	542	136	42	24	23
14	30	44	3490	180	120	4500	166	756	93	43	27	24
15	26	42	5510	160	120	6380	150	823	74	40	30	23
16	24	49	2090	150	110	5350	140	551	68	37	27	86
17	22	78	1100	140	110	2490	134	463	65	34	28	110
18	20	92	2480	140	100	1370	189	372	62	31	28	60
19	20	79	2980	130	100	1330	245	289	454	29	29	35
20	20	65	1180	130	96	1690	391	251	279	28	26	28
21	19	184	800	120	94	2570	396	245	273	26	23	25
22	19	157	528	120	92	1880	285	207	188	25	20	22
23	18	123	379	120	90	1360	251	279	128	26	19	20
24	17	97	319	120	90	1290	391	2050	101	48	18	18
25	19	83	789	180	88	1180	1090	984	89	50	17	17
26	58	72	693	430	86	3300	1670	537	233	38	19	17
27	53	64	394	320	84	1460	687	357	110	34	24	17
28	52	59	312	340	82	901	434	269	82	31	59	17
29	44	55	245	300	---	679	329	221	77	30	30	16
30	39	210	207	270	---	512	273	186	73	33	75	17
31	35	---	170	250	---	425	---	163	---	30	420	---
TOTAL	1174	2062	30847	7125	3652	40419	10964	11426	3808	1706	1618	1465
MEAN	37.9	68.7	995	230	130	1304	355	369	127	55.0	52.2	48.8
MAX	119	210	5510	1010	240	6380	1670	2050	454	224	420	350
MIN	17	27	170	110	82	66	134	118	62	25	17	16
CFSM	.14	.25	3.62	.84	.47	4.74	1.33	1.34	.46	.20	.19	.18
IN.	.16	.28	4.17	.96	.49	5.47	1.48	1.55	.52	.23	.22	.20

CAL YR 1977 TOTAL 77081.0 MEAN 211 MAX 5510 MIN 6.1 CFSM .77 IN 10.43
WTR YR 1978 TOTAL 116266.0 MEAN 319 MAX 6380 MIN 16 CFSM 1.16 IN 15.73

Note: No gage height record July 26 to Aug. 28.

03272410 GREAT MIAMI RIVER AT ROCKDALE, Oh

LOCATION.--39°26'12", long 84°27'08", Butler County, Hydrologic Unit 05080002, on left bank 1.1 mi (1.8 km) downstream from Gregory Creek at Rockdale and at mile 43.73 (70.36 km).

DRAINAGE AREA.--3.275 mi² (8,482 km²).

PERIOD OF RECORD.--June 1978 to September 1978.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1978 to September 1978.
pH: June 1978 to September 1978.
WATER TEMPERATURES: June 1978 to September 1978.
DISSOLVED OXYGEN: June 1978 to September 1978.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. Dissolved oxygen concentrations listed as 20.0 mg/L represent concentrations of 20.0 mg/L or higher due to instrument limitations. No discharge records available.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 956 micromhos Sept. 26, 1978; minimum recorded, 412 micromhos Aug. 31, 1978.
pH: Maximum recorded, 9.1 units July 14, 1978; minimum recorded, 7.4 units July 24, 1978.
WATER TEMPERATURES: Maximum recorded, 31.5°C July 22, 1978; minimum recorded, 19.5°C Sept. 29, 1978.
DISSOLVED OXYGEN: Maximum recorded, 20.0 mg/L or higher July 14, 16, Sept. 9, 1978; minimum recorded, 1.6 mg/L July 22, 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 956 micromhos Sept. 26; minimum recorded, 412 micromhos Aug. 31.
pH: Maximum recorded, 9.1 units July 14; minimum recorded, 7.4 units July 24.
WATER TEMPERATURES: Maximum recorded, 31.5°C July 22; minimum recorded, 19.5°C Sept. 29.
DISSOLVED OXYGEN: Maximum recorded, 20.0 mg/L or higher July 14, 16, Sept. 9; minimum recorded, 1.6 mg/L July 22.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1					---	---	826	754	794	774	662	544
2					---	---	776	610	814	780	690	624
3					---	---	652	556	834	594	760	694
4					---	---	662	646	556	460	780	758
5					---	---	680	662	570	480	810	780
6					---	---	706	662	664	574	832	800
7					---	---	752	706	754	668	840	818
8					---	---	780	752	804	744	856	828
9					---	---	808	780	824	804	866	826
10					---	---	828	806	826	710	880	850
11					---	---	842	820	818	782	886	858
12					---	---	842	828	778	674	880	866
13					---	---	840	802	748	684	896	872
14					---	---	824	782	774	708	918	888
15					814	786	812	788	834	780	928	910
16					832	818	816	784	856	832	954	836
17					854	836	804	768	856	784	868	744
18					858	838	822	792	818	768	744	700
19					854	808	846	814	832	770	786	702
20					800	618	868	846	814	726	894	792
21					698	632	882	792	790	764	928	898
22					702	674	898	826	788	736	932	922
23					780	708	900	864	844	762	950	920
24					810	780	898	730	906	848	950	928
25					828	730	826	784	908	894	948	934
26					788	488	786	742	908	532	956	938
27					772	752	830	770	886	694	938	922
28					790	768	848	832	896	550	942	914
29					816	790	872	850	800	696	946	932
30					824	804	874	816	676	540	954	920
31					---	---	790	760	562	412	---	---
MONTH					858	488	900	556	908	412	956	544
YEAR	956	412										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03272410 GREAT MIAMI RIVER AT ROCKDALE, OH--Continued

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1					---	---	8.3	7.9	8.1	7.7	8.2	7.9
2					---	---	8.0	7.8	8.2	7.8	8.2	7.8
3					---	---	8.1	7.9	7.9	7.6	8.1	8.0
4					---	---	8.2	8.1	7.6	7.5	8.2	8.0
5					---	---	8.2	8.0	7.6	7.5	8.2	8.1
6					---	---	8.0	7.9	7.6	7.6	8.3	8.1
7					---	---	8.0	7.9	7.8	7.6	8.6	8.1
8					---	---	8.1	7.9	8.1	7.8	8.9	8.2
9					---	---	8.1	7.9	8.4	7.9	9.0	8.2
10					---	---	8.2	8.0	8.2	7.8	9.0	8.4
11					---	---	8.5	8.1	8.2	8.0	8.9	8.4
12					---	---	8.8	8.1	8.0	7.9	8.6	8.1
13					---	---	8.9	8.5	8.0	7.9	8.1	7.9
14					---	---	9.1	8.3	8.5	7.9	7.9	7.8
15					8.5	8.3	8.8	8.4	8.5	7.9	8.0	7.8
16					8.5	8.1	9.0	8.3	8.5	7.8	7.9	7.8
17					8.3	8.0	9.0	8.5	8.6	8.1	7.8	7.8
18					8.5	8.1	8.6	8.2	8.5	8.0	8.0	7.8
19					8.2	8.1	8.2	7.8	8.3	8.0	8.3	7.9
20					8.2	7.9	7.8	7.7	8.4	7.9	8.3	8.0
21					8.0	7.8	7.7	7.6	8.3	8.0	8.4	8.0
22					7.9	7.9	7.6	7.5	8.4	7.8	8.5	8.1
23					8.2	7.9	7.7	7.5	8.3	7.8	8.7	8.2
24					8.5	8.0	7.6	7.4	8.3	7.9	8.3	8.0
25					8.4	8.0	7.8	7.5	8.5	7.9	8.3	8.0
26					8.3	7.8	8.0	7.7	8.6	8.1	8.5	8.0
27					8.4	7.9	8.2	7.7	8.5	7.9	8.5	8.1
28					8.5	8.3	8.3	7.8	8.1	7.8	8.7	8.1
29					8.7	8.3	8.4	7.9	8.1	7.9	8.7	8.2
30					8.7	8.2	7.9	7.7	8.2	7.8	8.6	8.2
31					---	---	7.9	7.7	8.2	7.9	---	---
MONTH					8.7	7.8	9.1	7.4	8.6	7.5	9.0	7.8
YEAR	9.1	7.4										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1					---	---	29.5	27.0	26.0	23.5	24.0	21.0
2					---	---	27.0	25.0	27.0	25.0	24.0	21.0
3					---	---	25.5	25.0	28.0	25.0	24.0	22.0
4					---	---	25.0	24.5	26.0	24.0	24.5	22.5
5					---	---	25.0	24.0	24.0	23.0	25.0	22.5
6					---	---	25.0	22.5	23.5	23.0	26.0	23.0
7					---	---	26.5	24.0	24.0	23.0	26.5	24.0
8					---	---	28.0	25.0	24.5	22.5	27.5	25.0
9					---	---	27.5	25.5	26.5	23.5	28.5	26.0
10					---	---	27.0	25.5	26.0	24.0	29.0	26.5
11					---	---	27.0	24.5	26.0	25.0	28.5	27.0
12					---	---	26.5	24.0	25.5	24.5	27.0	26.0
13					---	---	26.0	24.0	26.5	24.0	27.5	26.0
14					---	---	28.0	25.0	28.0	25.5	27.0	26.0
15					23.0	22.5	27.0	26.0	28.5	25.5	27.5	25.0
16					25.0	22.5	28.0	25.5	28.0	26.5	26.5	25.0
17					26.0	23.5	28.0	25.0	28.5	26.0	26.5	25.0
18					27.0	24.5	28.0	25.0	29.0	26.5	26.5	24.5
19					27.0	25.0	29.0	25.5	28.0	26.5	27.5	25.0
20					26.5	25.0	30.0	27.0	27.0	25.0	29.0	26.5
21					26.0	24.5	30.0	28.5	27.0	24.5	29.0	27.5
22					26.0	23.5	31.5	29.0	27.0	24.0	27.0	24.0
23					25.5	23.5	31.0	29.0	28.0	25.0	25.0	22.5
24					26.5	24.0	29.0	26.5	29.0	26.0	25.0	23.0
25					26.0	24.5	27.5	26.0	29.0	27.0	24.0	22.0
26					26.0	23.0	28.0	25.0	29.0	25.0	23.0	20.5
27					28.5	25.5	28.0	26.0	28.5	26.0	22.5	20.5
28					30.5	27.0	29.0	26.0	27.0	23.5	22.0	20.0
29					31.0	28.5	28.5	27.0	27.5	25.0	22.0	19.5
30					31.0	29.0	27.5	24.0	25.5	23.5	20.5	20.0
31					---	---	26.0	24.0	25.0	20.0	---	---
MONTH					31.0	22.5	31.5	22.5	29.0	20.0	29.0	19.5
YEAR	31.5	19.5										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03272410 GREAT MIAMI RIVER AT ROCKDALE, OH--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1					---	---	7.0	4.0	9.0	4.7	8.4	7.4
2					---	---	7.1	4.1	9.9	4.8	7.9	7.0
3					---	---	7.5	7.2	6.5	4.4	8.0	6.9
4					---	---	7.7	7.4	7.1	5.4	8.5	6.5
5					---	---	7.9	7.2	6.0	5.7	8.9	6.6
6					---	---	6.9	6.2	6.1	5.4	9.9	6.6
7					---	---	7.1	6.1	7.6	5.1	13.7	6.3
8					---	---	8.1	5.6	9.5	5.9	18.0	6.3
9					---	---	8.7	5.5	12.0	5.8	20.0	6.3
10					---	---	9.5	5.8	8.7	5.3	19.3	6.3
11					---	---	12.6	6.1	8.9	5.9	18.1	6.1
12					---	---	17.3	5.8	7.0	5.6	10.4	5.9
13					---	---	17.2	6.8	8.8	5.6	6.5	4.4
14					---	---	20.0	5.9	14.0	5.6	5.5	4.2
15					11.2	7.8	14.5	5.9	14.7	5.8	7.6	4.2
16					10.9	5.5	20.0	5.2	12.3	5.2	6.1	4.2
17					10.0	5.0	19.3	6.2	13.9	5.8	5.8	4.7
18					12.3	5.2	14.1	5.9	12.7	5.4	8.4	4.9
19					7.5	4.9	7.5	4.7	8.9	5.1	10.2	5.6
20					7.2	5.9	5.9	3.5	11.7	5.3	10.2	5.3
21					7.4	5.3	4.9	2.7	10.7	5.5	11.2	5.2
22					7.1	5.6	6.6	1.6	10.9	5.2	12.2	5.4
23					9.8	5.9	7.5	2.4	10.0	5.0	15.8	6.5
24					12.9	5.9	4.5	2.5	11.6	4.8	9.1	5.4
25					11.0	5.7	5.6	3.3	13.3	5.2	10.3	5.8
26					8.0	5.4	8.5	4.0	12.9	4.7	13.0	6.3
27					11.1	5.4	10.8	3.8	12.1	4.9	12.4	6.6
28					18.0	5.7	10.6	4.2	8.2	5.8	14.9	6.4
29					15.0	5.6	12.0	4.9	7.3	5.0	14.3	7.0
30					14.4	5.1	5.8	4.6	7.9	5.4	12.5	7.2
31					---	---	7.0	4.6	8.1	7.2	---	---
MONTH					18.0	4.9	20.0	1.6	14.7	4.4	20.0	4.2
YEAR	20.0	1.6										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03272700 SEVENMILE CREEK AT CAMDEN, OH

LOCATION.--Lat 39°37'45", long 84°38'40", Preble County, Hydrologic Unit 05080002, 0.3 mi (0.5 km) downstream from Beasley Run on right bank at downstream side of bridge on State Highway 725 in Camden, and at mile 16.2 (26.1 km).

DRAINAGE AREA.--69.0 mi² (179 km²).

PERIOD OF RECORD.--December 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 818.57 ft (249.501 m) National Geodetic Vertical Datum of 1929. (Levels by Miami Conservancy District). Prior to Oct. 1, 1975, at same site at datum 3.02 ft (0.920 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Water-quality data collected at this site 1972 to 1974.

COOPERATION.--Gage-height charts, tapes, and 10 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--7 years (1972-78), 70.7 ft³/s (2.002 m³/s), 13.91 in/yr (353 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,210 ft³/s (176 m³/s) June 22, 1974, gage height 13.25 ft (4.039 m), present datum from rating curve extended above 2,200 ft³/s (62.3 m³/s); minimum daily, 1.6 ft³/s (0.045 m³/s) July 21, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,500 ft³/s (42.5 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 14	---	2500	70.8	---	---	Mar. 14	1445	3280	92.9	10.12	3.085

Minimum daily, 4.6 ft³/s (0.13 m³/s) Oct. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	9.7	500	34	46	10	93	63	47	104	15	15
2	49	9.2	230	29	40	9.8	73	55	40	116	13	73
3	20	8.7	140	26	36	9.6	66	51	38	60	202	47
4	13	8.2	94	23	32	9.4	65	56	35	40	55	33
5	10	7.3	210	21	29	9.2	59	58	32	30	27	25
6	9.6	6.9	150	24	27	9.2	72	45	28	23	21	23
7	8.1	11	91	30	25	9.2	116	42	35	20	19	18
8	20	12	76	130	23	9.6	89	45	37	18	17	16
9	31	12	70	120	21	23	75	47	31	16	13	12
10	27	19	44	70	20	37	70	39	28	15	17	13
11	16	19	40	52	19	23	70	36	24	14	14	12
12	11	15	38	47	16	98	60	40	58	13	13	11
13	9.1	13	134	42	17	266	53	169	61	16	13	8.1
14	7.7	11	1900	38	16	2110	45	197	31	16	12	9.3
15	6.9	11	650	35	15	1290	43	196	25	13	22	9.3
16	6.4	17	328	33	14	749	40	145	23	11	14	16
17	5.6	35	235	31	14	502	36	127	21	9.6	12	24
18	5.3	28	960	29	13	331	57	103	31	8.7	10	15
19	5.6	21	400	27	13	424	60	88	224	8.3	18	10
20	5.5	18	240	25	12	452	58	78	87	7.8	14	8.0
21	5.3	79	150	23	12	781	63	76	116	7.5	7.9	8.9
22	5.2	55	100	21	12	492	51	66	71	8.0	7.5	7.5
23	4.9	40	88	23	11	428	59	125	49	8.2	6.6	5.0
24	4.6	32	75	26	11	402	94	367	39	27	6.6	4.8
25	6.4	27	90	42	11	533	230	238	40	19	6.8	4.7
26	30	23	120	140	11	653	256	156	230	12	25	4.7
27	24	18	84	95	19	320	151	112	64	9.8	31	5.8
28	16	18	65	80	18	241	104	93	43	8.7	74	7.6
29	13	15	52	70	---	194	88	81	33	7.9	50	6.7
30	11	59	46	60	---	143	74	70	30	55	179	7.4
31	10	---	40	52	---	104	---	54	---	26	374	---
TOTAL	494.2	658.0	7440	1498	538	10672.0	2488	3120	1651	748.5	1309.4	576.8
MEAN	15.9	21.9	240	48.3	19.2	344	82.9	101	55.0	24.1	42.2	19.2
MAX	97	79	1900	140	46	2110	266	367	230	116	374	134
MIN	4.6	6.9	38	21	10	9.2	36	36	21	7.5	6.6	4.7
CFSM	.23	.32	3.48	.70	.28	4.99	1.20	1.46	.80	.35	.61	.28
IN.	.27	.35	4.01	.81	.29	5.75	1.34	1.68	.89	.40	.71	.31

CAL YR 1977 TOTAL 21842.1 MEAN 59.8 MAX 2040 MIN 1.6 CFSM .87 IN 11.78
WTR YR 1978 TOTAL 31193.9 MEAN 85.5 MAX 2110 MIN 4.6 CFSM 1.24 IN 16.82

03274000 GREAT MIAMI RIVER AT HAMILTON, OH

LOCATION.--Lat 39°23'28", long 84°34'20", in NE 1/4 sec. 6, T.1 N., R.3 E., Butler County, Hydrologic Unit 05080002, on right bank 1,000 ft (305 m) downstream from Columbia Bridge at Hamilton, 3 mi (5 km) downstream from Four Mile Creek, 4.3 mi (6.9 km) upstream from Pleasant Run, and at mile 34.8 (60.0 km).

DRAINAGE AREA.--3,630 mi² (9,402 km²).

PERIOD OF RECORD.--January 1907 to June 1909 (fragmentary), January 1910 to September 1918, April 1927 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at site 0.7 mi (1.1 km) upstream since 1911 are contained in reports of National Weather Service. Prior to October 1962, published as Miami River at Hamilton.

REVISED RECORDS.--WSP 803: 1936. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 499.98 ft (152.394 m) National Geodetic Vertical Datum of 1912. Prior to Apr. 12, 1927, nonrecording gage at site 0.7 mi (1.1 km) upstream at datum 64.65 ft (19.705 m) higher.

REMARKS.--Records good. Some regulation at low flow by industrial plants upstream from station. Flood flow regulated by five retarding basins upstream from station beginning in 1920 (see REMARKS for station numbers 03271500 and 03272000). Small diversion about 6 mi (10 km) upstream from gage for municipal supply of Hamilton. Diversion averaged 0.89 ft³/s (0.025 m³/s) in 1978 and is returned as sewage 1.4 mi (2.3 km) downstream from the station. The Miami and Erie Canal diverted water from the basin 1.7 mi (2.7 km) upstream from station until Nov. 1, 1930, when the canal was abandoned; amount of diversion not known. Water-quality data collected at this site for water years 1950, 1951, 1973. Water temperature data collected at this site October 1950 to September 1951, October 1957 to September 1976.

COOPERATION.--Gage-height charts, tapes and 12 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--47 years (1931-78), 3,203 ft³/s (90.71 m³/s), 11.99 in/yr (305 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 352,000 ft³/s (9,970 m³/s) Mar. 26, 1913, gage height, 38.5 ft (11.73 m), site and datum then in use, computed by Miami Conservancy District; maximum discharge since construction of five retarding basins upstream in 1922, 108,000 ft³/s (3,059 m³/s) Jan. 21, 1959, gage height 79.47 ft (24.222 m); minimum daily discharge, 155 ft³/s (4.39 m³/s) Sept 27, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 40,400 ft³/s (1,286 m³/s) Mar. 15, gage height, 70.15 ft (21.382 m); minimum daily, 564 ft³/s (16.0 m³/s) Oct. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3560	621	8310	2660	3250	1310	6930	3850	2520	1340	1090	5620
2	3240	628	6340	2440	3120	1260	6030	3480	2270	3500	930	3370
3	3110	623	5910	2150	2860	1290	5330	3180	2120	4430	4670	2350
4	2070	626	4500	1950	2670	1260	5110	3010	1930	4630	5500	1820
5	1410	604	7780	1940	2470	1180	5000	3100	1830	4000	2620	1500
6	1170	598	7020	2110	2340	1180	4900	2790	1810	2980	1830	1330
7	1010	623	4430	2590	2130	1250	6920	2530	1890	2200	1470	1150
8	1110	665	3260	7890	2050	1300	9140	2490	2570	1830	1440	1080
9	1440	748	3410	7310	1980	1370	7030	2850	2960	1550	1520	990
10	1230	782	2650	4710	1900	1690	5760	2520	2080	1440	1590	909
11	1220	824	2180	3200	1820	2280	5250	2350	1770	1360	1540	863
12	1250	769	2180	3000	1770	4010	4830	2310	1670	1230	2020	850
13	1120	734	3110	2800	1760	6140	4330	5370	2590	1210	1350	808
14	970	716	26300	2600	1760	28900	3850	7230	1900	1280	1220	835
15	881	742	28600	2400	1680	37500	3490	8080	1860	1230	1200	789
16	806	951	23700	2300	1650	35900	3170	7100	1760	1140	1100	1050
17	726	1700	19000	2200	1600	31200	3000	6220	1570	1070	1400	1660
18	695	1210	23900	2100	1540	25100	3410	5200	1460	1020	1450	1020
19	695	1090	21000	2000	1460	21600	4730	4240	2760	938	1320	952
20	695	1070	17600	2000	1400	20400	8740	3660	3770	922	1460	866
21	660	2670	14300	1900	1460	21100	11600	3570	3530	945	1060	814
22	627	2330	9910	1800	1430	23700	10300	3200	2900	879	939	762
23	614	1710	6770	1700	1380	21200	7920	3230	2160	806	879	726
24	564	1440	5600	1700	1390	19400	7040	6370	1850	1440	807	708
25	669	1230	6720	2260	1370	16900	8620	9090	1640	1560	796	656
26	1520	1130	7040	6180	1330	21300	13900	6330	2960	1200	1070	671
27	1070	1050	5060	5100	1310	19700	10900	4920	2140	1050	1190	666
28	849	1010	3700	4620	1320	17200	7430	3900	1690	907	1820	680
29	721	1030	3330	4450	---	14000	5200	3350	1560	850	2410	660
30	637	2540	3190	3960	---	10400	4390	3020	1370	1510	4040	665
31	657	---	2920	3550	---	8140	---	2780	---	1708	8140	---
TOTAL	36996	32484	289720	97570	52200	419160	194250	131320	64890	52147	59871	36819
MEAN	1193	1083	9346	3147	1864	13520	6475	4236	2163	1682	1931	1227
MAX	3560	2670	28600	7890	3250	37500	13900	9090	3770	4630	8140	5620
MIN	564	598	2180	1700	1310	1180	3000	2310	1370	806	796	656
CFSM	.33	.30	2.58	.87	.51	3.73	1.78	1.17	.60	.46	.53	.34
IN.	.38	.33	2.97	1.00	.53	4.30	1.99	1.35	.66	.53	.61	.38

CAL YR 1977 TOTAL 819982 MEAN 2247 MAX 28600 MIN 323 CFSM .62 IN 8.40
WTR YR 1978 TOTAL 1467427 MEAN 4020 MAX 37500 MIN 564 CFSM 1.11 IN 15.04

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OH
(National stream-quality accounting network station)

LOCATION.--Lat 39°15'47", long 84°40'04", in N 1/2 sec. 34, R.1, T.2, Hamilton County, Hydrologic Unit 05080002, at Blue Rock Road bridge at New Baltimore, 6.4 mi (10.3 km) downstream from Indian Creek, and 14.3 mi (23.0 km) downstream from discharge station at Hamilton.

DRAINAGE AREA.--3,814 mi² (9,878 km²).

PERIOD OF RECORD.--July 1966 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1966 to current year.
pH: March 1975 to current year.
WATER TEMPERATURES: July 1966 to current year.
DISSOLVED OXYGEN: July 1966 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. Dissolved oxygen concentrations listed as 20.0 mg/L represent concentrations of 20.0 mg/L or higher due to instrument limitations prior to March 29, 1978; 20.0 mg/L limitation thereafter. Samples were collected each month as part of the National Stream Quality Accounting Network. See records of daily discharge for station at Hamilton (station 0327400).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,160 micromhos Mar. 18, 1970; minimum, 230 micromhos May 24, 1968.
pH: Maximum recorded, 9.2 units Aug. 4, 1977; minimum recorded, 7.0 units June 19, 1975.
WATER TEMPERATURES: Maximum, 36.5°C July 15, 16, 21, 1977; minimum, 0.0°C on several days during winter months in 1970, 1971, 1976, 1977, Jan. 26-30, 1978.
DISSOLVED OXYGEN: Maximum, 20.0 mg/L or higher Aug. 15, Sept. 24, 1978; minimum, 0.0 mg/L June 27, 1971.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,010 micromhos Nov. 8, 9; minimum, 264 micromhos Oct. 1.
pH: Maximum recorded, 9.0 units Aug. 15, Sept. 24; minimum recorded, 7.4 units Mar. 6.
WATER TEMPERATURES: Maximum, 33.0°C June 30; minimum, 0.0°C Dec. 10, Jan. 26-30.
DISSOLVED OXYGEN: Maximum, 20.0 mg/L or higher June 29; minimum, 3.0 mg/L Nov. 6, 7.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT												
18...	1600	980	8.0	14.5	1	--	8.5	83	--	--	680	660
NOV												
15...	1215	955	7.6	11.0	15	--	8.0	72	--	--	1200	490
DEC												
12...	1230	740	8.0	2.0	6	--	12.8	91	--	--	1000	540
JAN												
03...	1400	814	8.2	2.5	10	--	12.9	94	--	--	1300	1000
FEB												
15...	1130	850	8.0	3.5	7	--	10.8	81	--	--	3400	470
MAR												
07...	1200	1000	8.1	7.0	10	--	10.6	87	--	--	1200	750
APR												
10...	1130	825	8.0	14.5	50	--	9.5	92	--	--	11000	2400
MAY												
08...	1215	779	8.3	13.5	55	--	9.7	92	15	--	1500	9500
JUN												
12...	1145	880	8.3	25.0	20	--	8.3	99	35	--	1600	260
JUL												
05...	1140	837	7.9	24.0	--	45	7.3	86	39	--	5400	1000
AUG												
01...	1200	735	7.9	25.5	--	20	6.2	75	--	30	>2400	330
SEP												
06...	1215	755	8.0	24.5	--	20	8.9	100	--	8	920	220

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT 18...	350	120	84	34	46	7.1	280	0	230	4.5	110	73
NOV 15...	360	110	85	35	54	7.0	300	0	250	12	110	86
DEC 12...	370	120	92	34	36	3.9	300	0	250	4.8	87	59
JAN 03...	370	140	94	34	25	3.5	290	0	240	2.9	84	50
FEB 15...	360	100	90	34	35	3.2	320	0	260	5.1	99	60
MAR 07...	350	90	85	33	60	4.0	310	0	250	3.9	98	100
APR 10...	270	84	65	25	14	3.0	230	0	190	3.7	61	30
MAY 04...	330	94	82	30	24	2.8	280	0	230	2.2	84	44
JUN 12...	340	110	83	33	28	3.7	290	0	240	2.3	85	48
JUL 05...	270	77	64	26	19	3.5	--	--	190	--	57	36
AUG 01...	--	--	--	--	--	--	--	--	200	--	78	54
SEP 06...	330	85	74	31	27	3.1	--	--	240	--	75	47

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M
OCT 18...	.6	8.6	528	501	--	--	--	--	.62	12	--	--
NOV 15...	.8	6.5	561	532	--	--	--	--	.71	--	12000	1.26
DEC 12...	.4	10	510	480	--	--	--	--	.40	7.6	--	--
JAN 03...	.3	8.6	482	442	--	--	--	--	.35	--	--	--
FEB 15...	1.0	7.6	508	488	.80	2.4	5.4	24	.40	5.5	--	--
MAR 07...	.4	3.4	573	538	1.1	2.6	5.1	23	.49	7.8	1200	--
APR 10...	.2	5.4	392	321	1.0	1.3	6.5	29	.29	--	--	1.89
MAY 04...	.4	2.7	422	406	.97	1.2	4.6	20	.55	9.2	25000	79.4
JUN 12...	.5	3.6	461	428	1.5	1.6	4.9	22	.44	8.2	26000	8.82
JUL 05...	.3	6.6	440	327	1.0	1.2	5.5	24	.52	--	--	--
AUG 01...	.4	6.3	467	--	.58	.74	3.7	16	.55	6.3	--	--
SEP 06...	.4	7.8	448	415	1.1	1.2	4.5	20	.39	4.6	--	--

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OH--Continued

ANALYSES OF MINOR ELEMENTS

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
NOV												
15...	1215	<2	2	0	0	20	4	0	0	10	2	610
JAN												
03...	1400	1	0	0	0	<10	0	0	0	9	5	700
APR												
10...	1130	<2	1	1	0	10	1	0	0	13	4	2500
JUL												
05...	1140	<2	1	5	5	10	0	0	0	21	3	4000

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV											
15...	30	45	6	80	70	<.5	<.5	3	2	200	120
JAN											
03...	50	24	3	60	40	<.5	<.5	2	2	50	40
APR											
10...	50	24	10	60	20	<.5	<.5	1	1	60	20
JUL											
05...	0	100	100	210	10	.5	.5	1	0	80	10

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPERA-TURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT					
18...	1900	1150	14.5	26	81
NOV					
15...	1215	802	11.0	20	45
DEC					
16...	1230	2150	2.0	16	93
JAN					
03...	1400	2100	2.5	48	272
FEB					
15...	1130	1670	3.5	11	50
MAR					
07...	1200	1230	7.0	12	40
APR					
10...	1130	5730	14.5	66	1020
MAY					
08...	1215	2420	13.5	120	784
JUN					
16...	1145	1560	25.0	76	323
JUL					
05...	1140	4020	24.0	240	2610
AUG					
01...	1200	1070	25.5	48	134
SEP					
08...	1215	1320	24.5	48	171

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OH--Continued

PESTICIDE ANALYSES

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ATRAZINE, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL (UG/L)
NOV											
15...	1215	ND	--	ND	ND	--	ND	--	ND	--	ND
FEB											
15...	1130	ND	--	ND	ND	--	ND	--	ND	--	ND
MAY											
08...	1200	ND	ND	ND	ND	2	ND	ND	ND	ND	ND
AUG											
01...	1145	ND	--	1.4	ND	--	ND	--	ND	--	ND

DATE	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL (UG/L)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN TOTAL (UG/L)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL (UG/L)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
NOV											
15...	--	ND	--	ND	--	ND	--	ND	--	ND	--
FEB											
15...	--	ND	--	ND	--	ND	--	ND	--	ND	--
MAY											
08...	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND
AUG											
01...	--	--	--	ND	--	ND	--	--	--	ND	--

DATE	HEPTACHLOR EPOXIDE TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL (UG/L)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHYL PARATHION, TOTAL (UG/L)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOTAL (UG/L)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)
NOV										
15...	ND	--	ND	--	ND	--	ND	--	ND	--
FEB										
15...	ND	--	ND	--	ND	--	ND	--	ND	--
MAY										
08...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG										
01...	ND	--	ND	--	--	--	--	--	--	--

DATE	PARATHION, TOTAL (UG/L)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	SIMAZINE TOTAL COULSON COND. (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOTAL TRITHION (UG/L)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
NOV										
15...	ND	--	ND	ND	--	ND	--	ND	ND	ND
FEB										
15...	ND	--	ND	ND	--	ND	--	ND	ND	ND
MAY										
08...	ND	ND	ND	ND	ND	ND	ND	--	--	--
AUG										
01...	--	--	ND	ND	--	--	--	--	--	--

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1000	264	962	903	648	590	807	789	741	735	914	893
2	836	458	977	906	641	618	810	801	765	741	915	902
3	783	554	998	975	---	---	851	810	777	767	921	903
4	668	558	1000	986	735	725	852	845	792	777	945	915
5	665	624	1000	989	737	536	---	---	807	791	950	926
6	690	653	1000	990	645	561	---	---	815	801	948	914
7	753	693	1000	989	729	647	---	---	827	809	1000	953
8	771	735	1010	993	803	735	---	---	827	822	951	932
9	798	755	1010	968	---	---	---	---	---	---	959	933
10	834	776	993	960	873	812	---	---	854	842	996	956
11	840	803	989	974	---	---	---	---	864	849	954	863
12	800	789	977	912	---	---	---	---	873	858	866	707
13	834	803	948	923	902	720	791	780	872	864	707	594
14	851	837	951	915	681	467	788	777	869	860	569	336
15	870	851	969	915	485	446	800	785	878	850	366	308
16	873	860	960	879	458	447	---	---	905	890	318	303
17	896	875	884	840	---	---	---	---	914	905	368	309
18	936	897	851	801	---	---	833	815	909	888	381	365
19	947	930	873	854	---	---	834	825	903	888	413	381
20	957	930	869	848	---	---	842	827	912	897	441	411
21	954	930	848	605	---	---	846	837	906	885	458	441
22	972	942	770	675	---	---	854	831	894	888	450	419
23	992	962	771	752	---	---	858	843	899	888	432	368
24	987	972	762	743	---	---	852	837	906	890	458	426
25	977	975	831	764	---	---	856	828	911	903	503	459
26	882	683	855	833	---	---	851	737	906	899	501	483
27	879	780	867	848	---	---	885	773	914	900	488	449
28	912	840	885	858	729	720	770	732	909	905	507	485
29	929	915	894	867	746	728	744	737	---	---	564	510
30	933	912	893	644	773	746	738	722	---	---	587	567
31	915	899	---	---	789	767	737	728	---	---	608	590
MONTH	1000	264	1010	605	902	446	885	722	914	735	1000	303

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	620	596	734	716	764	726	804	524	735	683	548	503
2	656	602	752	732	779	741	788	566	758	737	615	551
3	674	644	771	746	806	776	665	585	744	438	678	617
4	687	668	770	749	816	794	668	630	731	450	725	681
5	689	678	771	755	824	791	686	629	501	449	744	663
6	702	683	780	755	828	809	687	680	572	506	758	747
7	711	683	794	762	828	794	720	684	644	576	775	759
8	693	600	786	750	816	722	795	719	717	647	792	698
9	617	594	765	746	771	716	783	764	762	719	822	744
10	656	617	780	762	779	717	810	785	782	737	791	743
11	699	657	791	780	783	735	824	812	785	749	762	728
12	702	695	795	786	807	792	830	806	786	723	824	758
13	732	707	783	548	---	---	837	789	732	702	849	710
14	744	732	657	612	777	765	828	653	882	708	854	830
15	---	---	663	629	777	735	672	635	792	683	879	854
16	---	---	681	657	810	767	719	612	765	706	896	884
17	786	759	678	657	830	815	675	629	819	764	894	845
18	774	717	693	680	854	831	668	618	810	753	849	792
19	768	722	714	695	830	762	---	---	791	765	789	711
20	729	606	729	716	780	669	818	732	788	765	720	699
21	593	510	737	720	663	560	834	815	780	696	807	717
22	546	509	743	720	705	654	837	777	768	717	873	812
23	579	548	752	729	722	687	839	807	782	755	899	875
24	620	579	747	698	776	726	848	621	753	738	902	876
25	639	606	687	560	795	555	836	674	833	803	915	890
26	603	575	668	578	782	560	788	741	861	834	920	906
27	638	567	704	671	732	560	785	728	854	687	929	918
28	627	573	714	705	741	729	752	731	---	---	921	903
29	686	630	728	713	765	705	798	752	729	681	917	899
30	716	686	743	729	783	732	822	759	764	545	914	900
31	---	---	756	717	---	---	809	642	567	483	---	---
MONTH	786	509	795	548	854	555	848	524	882	438	929	503
YEAR	1010	264										

GREAT MIAMI RIVER BASIN

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OH--Continued

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.2	7.6	8.0	7.9	8.0	7.9	8.3	8.2	8.2	7.9	8.3	7.9
2	8.1	7.7	8.0	7.8	8.2	8.0	8.3	8.2	8.1	7.9	8.3	8.2
3	8.1	7.8	7.9	7.8	---	---	8.3	8.2	8.2	7.9	8.3	8.0
4	8.2	7.9	7.8	7.7	8.2	8.2	8.3	8.2	8.2	7.7	8.4	7.9
5	8.2	8.0	7.8	7.7	8.2	7.7	---	---	8.2	8.1	8.4	8.2
6	8.1	7.9	7.7	7.6	8.3	7.7	---	---	8.2	8.0	8.4	7.4
7	8.1	8.0	7.7	7.6	8.4	8.1	---	---	8.3	7.9	8.3	8.1
8	8.2	8.0	7.7	7.5	8.4	8.2	---	---	---	---	8.3	8.1
9	8.2	8.1	7.7	7.6	---	---	---	---	---	---	8.2	8.1
10	8.4	8.1	7.9	7.8	8.5	8.4	---	---	---	---	8.3	8.0
11	8.2	8.1	---	---	---	---	---	---	---	---	8.2	8.1
12	8.3	8.1	---	---	---	---	---	---	---	---	8.1	7.9
13	8.3	8.1	---	---	8.2	8.1	8.1	7.9	---	---	8.2	7.9
14	8.2	8.0	---	---	8.2	8.0	8.1	7.9	8.1	7.6	8.2	8.1
15	8.2	7.9	7.9	7.6	8.1	7.9	8.1	8.1	8.0	7.9	8.2	8.1
16	8.2	8.0	7.9	7.8	8.1	8.0	---	---	8.1	7.8	8.1	8.0
17	8.3	8.1	7.9	7.8	---	---	---	---	8.1	7.6	8.2	8.0
18	8.2	8.0	8.0	7.8	---	---	8.0	7.5	8.2	7.7	8.2	8.1
19	8.5	8.1	7.9	7.7	---	---	8.0	7.9	8.2	7.7	8.2	8.0
20	8.2	8.0	7.9	7.8	---	---	8.0	7.9	8.3	7.8	8.2	7.9
21	8.2	7.9	7.9	7.7	---	---	8.2	7.9	8.2	7.9	8.2	8.0
22	8.1	7.8	7.9	7.7	---	---	8.2	7.7	8.2	7.9	8.1	7.9
23	8.1	7.9	7.9	7.9	---	---	8.2	7.7	8.2	8.0	8.0	7.8
24	8.2	7.9	7.9	7.6	---	---	8.2	7.8	8.1	7.9	8.0	7.8
25	8.0	7.9	8.0	7.8	---	---	7.9	7.7	8.1	7.9	8.1	7.9
26	7.9	7.8	8.1	8.0	---	---	8.3	8.0	8.2	7.9	8.1	7.9
27	8.0	7.8	8.1	7.9	---	---	8.3	8.2	8.3	8.1	8.1	7.8
28	8.0	7.9	8.3	7.9	8.1	7.8	8.3	8.2	8.1	7.9	8.1	8.0
29	8.1	7.9	8.1	7.9	8.1	7.9	8.2	8.2	---	---	8.2	8.0
30	8.1	7.9	8.0	7.9	8.2	7.9	8.3	8.0	---	---	8.2	8.1
31	8.1	7.9	---	---	8.2	8.1	8.2	8.1	---	---	8.2	8.0
MONTH	8.5	7.6	8.3	7.5	8.5	7.7	8.3	7.5	8.3	7.6	8.4	7.4

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.2	8.1	8.5	8.3	---	---	---	---	8.3	7.8	8.1	8.0
2	8.2	8.2	8.6	8.4	---	---	---	---	8.4	8.0	8.2	8.0
3	8.2	8.1	8.7	8.4	---	---	---	---	8.4	7.8	8.2	8.0
4	8.2	8.1	8.6	8.4	---	---	---	---	7.9	7.8	8.3	8.2
5	8.2	8.1	8.5	8.3	---	---	8.0	7.9	7.9	7.8	8.4	8.2
6	8.2	8.1	8.5	8.3	---	---	8.0	7.9	7.9	7.8	8.3	8.0
7	8.2	8.1	8.5	8.3	---	---	7.9	7.8	8.0	7.9	8.5	8.1
8	8.2	8.1	8.4	8.3	---	---	8.0	7.8	8.3	7.9	8.7	8.1
9	8.2	8.0	8.4	8.3	---	---	---	---	8.8	8.2	8.8	8.5
10	8.2	8.0	8.5	8.4	---	---	---	---	8.6	8.3	8.7	8.3
11	8.3	8.2	8.6	8.4	---	---	---	---	8.6	8.2	8.7	8.1
12	8.3	8.2	8.6	8.4	---	---	---	---	8.4	8.3	8.7	8.3
13	8.4	8.2	8.5	8.2	---	---	---	---	8.6	8.2	8.8	8.5
14	8.4	8.3	---	---	8.2	8.1	8.7	8.4	8.7	8.3	8.7	8.1
15	---	---	---	---	8.2	8.0	8.7	8.1	9.0	8.2	8.2	7.9
16	---	---	---	---	8.6	7.9	8.6	8.4	8.9	8.5	---	---
17	8.7	8.4	---	---	8.5	8.1	8.8	8.4	8.9	8.4	---	---
18	8.6	8.3	---	---	8.4	8.0	8.9	8.3	8.9	8.5	8.3	7.9
19	8.5	8.4	---	---	---	---	8.7	8.4	8.9	8.7	8.3	7.8
20	8.4	8.3	---	---	---	---	8.2	7.9	---	---	8.5	8.0
21	8.2	8.0	---	---	7.9	7.8	8.1	7.8	8.7	8.1	8.7	8.1
22	8.2	8.1	---	---	8.0	7.8	8.3	7.8	8.7	8.2	8.7	8.2
23	8.3	8.2	---	---	8.1	7.9	8.3	7.8	8.3	8.2	8.8	8.4
24	8.3	8.2	---	---	8.5	8.0	8.0	7.7	8.2	8.1	9.0	8.5
25	8.3	8.3	---	---	8.4	7.9	7.9	7.7	8.5	8.2	8.9	8.5
26	8.3	8.2	---	---	8.3	7.8	8.2	7.8	---	---	8.7	8.3
27	8.3	8.2	---	---	8.3	7.8	8.5	7.9	---	---	8.6	8.2
28	8.3	8.1	---	---	---	---	8.9	8.1	---	---	8.7	8.4
29	8.3	8.2	---	---	---	---	8.9	8.4	8.1	8.0	8.7	8.5
30	8.4	8.3	---	---	---	---	8.6	8.0	8.0	8.0	8.7	8.5
31	---	---	---	---	---	---	8.0	7.8	8.1	8.0	---	---
MONTH	8.7	8.0	8.7	8.2	8.6	7.8	8.9	7.7	9.0	7.8	9.0	7.8
YEAR	9.0	7.4										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCTOBER MAX	OCTOBER MIN	NOVEMBER MAX	NOVEMBER MIN	DECEMBER MAX	DECEMBER MIN	JANUARY MAX	JANUARY MIN	FEBRUARY MAX	FEBRUARY MIN	MARCH MAX	MARCH MIN
1	21.0	17.0	18.0	16.5	8.0	6.5	4.5	4.0	2.0	1.0	7.5	6.0
2	19.5	17.5	18.5	17.0	7.0	6.5	3.5	2.0	3.0	1.5	6.5	5.0
3	17.5	15.0	19.0	18.0	---	---	4.0	1.5	2.5	2.0	6.5	5.0
4	17.0	14.0	19.5	18.5	6.5	6.0	2.0	2.0	3.0	2.0	7.0	5.0
5	18.5	18.5	20.0	19.0	6.0	5.0	---	---	3.5	2.5	6.5	4.0
6	19.5	17.0	20.0	19.5	4.5	2.5	---	---	2.5	1.5	8.5	5.5
7	18.0	16.5	19.5	19.5	2.5	1.5	---	---	2.0	.5	8.5	6.5
8	17.0	16.5	20.5	19.5	2.0	1.5	---	---	1.5	.5	6.5	5.5
9	17.0	14.5	20.0	19.0	---	---	---	---	---	---	7.5	5.5
10	16.0	13.5	19.0	13.5	.5	.0	---	---	4.0	3.5	9.5	6.5
11	15.0	13.0	13.5	11.5	---	---	---	---	4.5	2.0	8.0	6.5
12	13.0	12.0	11.5	10.0	---	---	---	---	5.5	3.0	6.5	4.5
13	14.0	11.5	10.5	9.0	4.5	3.5	2.0	1.0	5.5	4.5	4.5	3.5
14	15.0	12.0	11.0	9.5	5.5	3.0	2.5	2.0	4.5	4.0	3.0	1.5
15	15.0	12.5	11.5	10.5	5.5	3.0	2.0	2.0	5.5	3.0	1.5	1.0
16	14.0	12.5	12.5	11.5	4.5	3.5	---	---	5.5	4.5	2.0	1.0
17	14.0	10.5	12.0	11.0	---	---	---	---	6.5	5.0	1.5	1.5
18	14.5	12.5	11.0	10.0	---	---	2.5	2.0	6.5	4.5	2.0	1.0
19	13.5	12.5	10.0	9.0	---	---	2.5	2.0	5.5	3.0	3.5	2.0
20	15.0	13.0	11.5	10.0	---	---	3.0	2.0	5.0	3.0	4.5	2.5
21	16.0	14.0	12.0	10.5	---	---	3.5	3.0	5.5	4.0	5.0	4.5
22	17.0	14.5	10.5	9.0	---	---	3.0	2.0	6.0	4.0	5.5	4.0
23	17.5	16.5	10.0	9.0	---	---	2.5	1.0	5.0	3.5	6.0	5.5
24	17.5	16.0	10.5	9.5	---	---	3.0	1.5	6.5	4.5	6.0	5.0
25	17.0	17.0	10.0	8.0	---	---	4.0	3.0	6.5	5.5	5.0	4.5
26	17.0	16.0	7.5	5.5	---	---	3.5	.0	7.5	5.5	5.0	5.0
27	18.0	17.0	5.5	4.5	---	---	.0	.0	7.0	5.0	5.0	4.5
28	17.5	16.5	5.5	4.0	1.0	.5	.0	.0	7.5	6.0	6.0	4.5
29	17.0	15.5	5.5	5.0	2.0	1.0	.5	.0	---	---	8.0	6.0
30	17.0	15.0	6.5	5.5	3.5	2.0	1.0	.0	---	---	9.5	7.5
31	17.0	15.5	---	---	4.5	3.5	1.5	.5	---	---	11.5	8.5
MONTH	21.0	10.5	20.5	4.0	8.0	.0	4.5	.0	7.5	.5	11.5	1.0

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1	14.0	11.0	16.0	14.0	27.0	24.5	31.5	28.5	27.5	25.0	23.5	21.0
2	12.5	12.0	16.5	14.0	26.5	25.0	28.5	26.0	28.5	26.5	24.0	22.0
3	13.5	11.5	16.5	14.5	26.0	24.0	26.5	25.0	27.5	25.5	25.0	22.5
4	14.5	13.0	15.5	14.0	25.0	23.0	25.5	24.0	28.0	25.0	25.5	23.0
5	15.0	13.0	14.0	13.0	25.5	22.0	25.5	23.0	25.0	23.5	25.5	23.0
6	15.0	13.5	14.5	12.5	24.0	22.5	26.5	23.5	24.0	23.5	25.5	23.5
7	16.0	14.0	14.0	13.0	25.0	23.0	28.0	25.0	24.5	23.5	26.5	24.5
8	15.0	13.5	15.0	13.5	25.5	23.5	29.0	26.0	25.5	23.0	28.0	25.5
9	15.0	12.5	16.5	14.5	25.0	23.0	29.0	26.5	27.5	24.5	29.0	26.5
10	16.5	13.5	18.0	15.0	26.0	22.5	28.5	27.0	27.5	26.0	29.5	27.0
11	16.5	15.0	19.0	16.0	27.0	23.5	28.0	25.0	27.5	25.5	29.0	27.5
12	17.0	14.0	18.5	17.5	26.0	24.5	27.5	24.5	26.5	25.5	28.0	27.0
13	17.5	15.0	18.0	16.0	---	---	27.0	24.5	28.0	25.0	28.5	26.5
14	17.5	14.0	16.0	13.0	25.0	24.0	28.5	26.0	28.5	26.5	27.5	26.5
15	---	---	13.5	12.5	24.0	22.5	28.5	26.5	29.5	27.0	28.0	25.5
16	---	---	14.0	13.5	25.5	22.5	29.0	25.5	29.5	27.5	27.0	25.5
17	17.5	13.5	15.5	13.0	27.0	24.5	29.0	26.0	29.5	27.0	27.5	25.5
18	15.0	13.5	18.5	15.0	28.0	25.0	29.0	26.5	29.5	27.5	28.5	26.5
19	14.5	13.5	21.0	17.5	28.5	25.0	30.0	27.5	30.0	28.5	29.0	26.5
20	13.0	10.0	22.5	20.0	28.0	26.0	31.0	28.0	28.5	26.0	29.0	27.5
21	10.0	8.5	22.0	20.5	27.0	25.5	31.0	30.0	27.5	25.0	29.5	28.0
22	9.5	8.0	21.0	18.5	27.0	24.5	32.5	29.5	28.0	25.5	28.5	24.5
23	10.0	9.0	20.5	19.0	26.5	24.0	32.0	30.0	28.5	26.0	25.0	23.0
24	11.0	9.5	20.0	19.0	27.5	24.0	30.5	27.0	27.5	27.0	25.0	23.5
25	12.0	11.0	19.5	18.0	27.0	22.5	28.0	27.0	30.5	28.5	24.5	22.5
26	11.5	10.5	21.5	18.0	27.5	24.5	29.5	26.5	30.0	29.0	23.5	21.5
27	13.0	11.0	23.0	20.0	30.0	26.0	29.5	27.5	29.0	27.0	23.0	21.5
28	14.5	12.0	24.0	21.5	31.5	28.5	30.0	27.0	28.0	27.5	22.5	20.5
29	15.0	13.5	25.0	23.0	32.5	29.0	29.5	27.5	27.5	26.5	22.0	20.0
30	16.0	14.5	25.0	23.5	33.0	29.5	29.0	26.5	27.0	24.0	20.5	20.0
31	---	---	26.5	23.0	---	---	26.5	25.0	23.5	21.5	---	---
MONTH	17.5	8.0	26.5	12.5	33.0	22.0	32.5	23.0	30.5	21.5	29.5	20.0
YEAR	33.0	.0										

03276600 GREAT MIAMI RIVER AT NEW BALTIMORE, OH--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.0	4.0	6.6	5.2	10.9	10.4	12.5	11.6	12.1	11.6	12.7	10.6
2	5.6	5.1	6.6	4.7	11.4	10.9	12.8	12.3	11.8	11.5	12.6	10.6
3	6.7	5.4	5.0	3.9	---	---	13.8	12.6	11.6	11.2	12.9	10.5
4	7.6	6.5	4.5	3.4	11.3	10.9	12.8	12.2	11.4	10.8	13.3	10.6
5	7.3	6.1	4.3	3.1	11.0	9.2	---	---	11.2	10.9	13.8	10.8
6	7.2	6.2	4.4	3.0	11.0	10.8	---	---	11.2	10.6	14.0	10.8
7	6.8	5.8	3.9	3.0	11.1	10.9	---	---	11.3	10.8	12.7	10.1
8	6.1	5.6	---	---	11.0	9.5	---	---	11.1	11.0	12.1	10.2
9	6.4	5.5	---	---	---	---	---	---	---	---	13.5	10.5
10	6.7	6.1	6.2	5.1	10.3	10.1	---	---	---	---	13.2	10.2
11	6.3	5.9	7.9	6.0	---	---	---	---	11.5	10.9	11.9	10.6
12	7.0	6.2	8.5	7.1	---	---	---	---	11.1	10.7	12.1	11.0
13	7.0	6.5	8.9	7.7	---	---	---	---	10.7	10.3	12.7	12.1
14	6.6	5.8	9.0	8.0	---	---	---	---	11.2	10.5	12.6	11.3
15	6.5	5.8	8.5	7.6	---	---	---	---	11.2	10.3	---	---
16	6.2	5.4	8.1	7.4	---	---	---	---	11.0	10.4	---	---
17	6.8	6.1	8.6	7.2	---	---	---	---	11.1	10.3	---	---
18	6.4	5.6	9.1	8.5	---	---	13.1	12.4	11.2	10.4	---	---
19	6.4	5.6	8.8	8.4	---	---	12.5	12.1	11.4	10.6	---	---
20	6.7	5.8	8.6	8.0	---	---	12.1	11.9	11.4	10.5	---	---
21	6.5	5.6	9.3	8.0	---	---	12.2	11.9	13.2	10.6	---	---
22	6.6	5.4	9.8	9.3	---	---	12.2	11.9	13.5	11.9	---	---
23	6.6	5.2	9.6	9.3	---	---	12.2	12.0	13.5	12.1	---	---
24	6.9	5.1	9.3	9.0	---	---	12.2	11.9	12.9	11.9	---	---
25	5.5	4.5	9.4	8.9	---	---	11.9	11.4	12.6	11.5	---	---
26	6.1	5.4	10.2	9.2	---	---	12.6	11.4	13.0	11.2	---	---
27	6.0	5.4	10.7	10.0	---	---	12.7	12.6	12.9	11.5	---	---
28	6.1	5.2	11.1	10.5	14.0	13.5	12.8	12.6	12.7	10.7	---	---
29	---	---	10.8	10.4	13.8	13.2	12.6	12.4	---	---	11.5	11.3
30	---	---	10.8	10.0	13.2	12.5	12.7	12.2	---	---	11.5	11.1
31	---	---	---	---	12.9	12.1	12.5	12.0	---	---	11.1	9.9
MONTH	8.0	4.0	11.1	3.0	14.0	9.2	13.8	11.4	13.5	10.3	14.0	9.9

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.0	7.4	11.8	8.3	18.2	7.5	12.0	5.7	9.8	5.1	7.7	7.3
2	9.6	8.1	12.2	9.8	13.5	7.2	---	---	10.5	5.6	7.7	7.1
3	9.6	9.0	12.6	9.4	13.5	6.6	7.4	6.1	8.4	5.3	7.9	7.0
4	9.1	7.3	11.0	9.2	13.4	6.8	7.6	6.3	6.0	4.6	9.3	6.6
5	8.2	7.1	10.9	9.0	13.6	6.9	7.9	6.9	6.1	5.8	10.2	6.6
6	7.9	6.9	11.7	9.4	10.5	6.5	7.4	6.6	5.9	5.5	8.9	7.1
7	7.5	6.2	11.0	9.4	9.1	6.4	7.2	6.5	6.6	5.3	13.5	7.2
8	8.3	5.8	10.6	9.3	9.2	5.6	9.2	6.2	10.3	5.2	15.6	7.1
9	9.5	7.0	10.6	9.1	6.7	5.7	11.4	5.9	12.1	7.4	17.8	7.4
10	9.8	8.7	12.4	8.7	9.0	5.9	8.9	6.1	12.4	7.2	19.2	7.9
11	9.3	8.9	13.9	8.8	13.4	6.2	---	---	10.5	6.9	19.8	7.5
12	9.8	8.9	12.7	8.1	9.9	6.7	---	---	10.4	7.0	13.7	7.6
13	10.0	8.7	10.6	8.0	---	---	---	---	13.7	6.7	16.2	6.3
14	10.1	8.2	9.7	8.8	10.8	9.2	---	---	15.8	7.2	10.4	6.1
15	---	---	10.2	9.6	10.5	7.4	13.8	7.3	19.4	7.1	8.8	4.8
16	---	---	9.9	9.7	15.0	6.6	15.3	6.0	17.4	7.3	8.1	4.4
17	11.5	8.2	10.0	9.6	14.0	6.6	13.1	6.7	17.1	6.7	7.1	4.6
18	11.3	7.2	10.0	9.2	13.5	6.2	12.8	5.8	17.1	6.5	7.8	4.8
19	10.3	9.0	10.5	8.6	10.9	5.7	11.5	5.2	13.6	6.4	9.9	4.7
20	10.0	9.2	12.2	8.0	8.2	5.9	6.3	4.7	8.4	4.8	12.8	5.4
21	10.3	9.8	13.3	7.7	7.0	5.7	8.8	4.0	13.0	5.7	13.6	5.7
22	10.5	10.2	13.3	8.1	7.5	6.1	11.4	3.8	10.3	6.6	12.6	5.7
23	10.1	9.7	12.1	8.2	9.0	6.3	11.2	4.5	10.5	6.0	15.1	7.2
24	9.9	9.5	9.7	7.9	12.9	6.7	6.9	4.7	7.7	5.8	17.7	7.6
25	9.5	9.3	8.8	8.3	10.6	6.8	6.7	5.0	10.9	7.0	16.4	8.4
26	10.0	9.4	8.8	8.3	8.7	6.2	9.8	5.1	15.8	5.9	14.0	6.6
27	9.9	9.4	8.9	7.8	10.2	5.9	12.1	5.2	---	---	12.4	6.7
28	9.4	9.1	11.6	7.4	14.7	6.2	17.9	6.6	---	---	13.4	7.3
29	9.3	8.8	13.4	7.4	20.0	6.7	17.9	7.3	7.8	6.7	14.3	8.1
30	9.8	8.3	15.4	7.3	18.3	6.7	11.2	5.9	6.7	5.7	11.5	8.7
31	---	---	19.5	7.5	---	---	6.4	5.5	7.6	6.8	---	---
MONTH	11.5	5.8	19.5	7.3	20.0	5.6	17.9	3.8	19.4	4.6	19.8	4.4
YEAR	20.0	3.0										

As the number of streams on which discharge information is likely to be desired far exceeds the number of stations feasible to operate at one time, the Geological Survey collects limited data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in time of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. Given first is a table of discharge measurements at low flow partial-record stations and second is a table followed by a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

LOW-FLOW PARTIAL-RECORD STATIONS

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. These measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of a stream. The "PERIOD OF RECORD" column shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1978

Station No	Station name	Location	Drainage area (mi²)	Period of record	Measurements Date	Measurements Discharge (cfs)
		ISLAND CREEK BASIN				
03110850	Island Creek near Toronto, OH	Lat 40°25'48", long 80°37'00", Jefferson County, Hydrologic Unit 05030101, at boat ramp on State Highway 7, below Little Island Creek, and 2 mi (3 km) south of Toronto. Water-quality data collected at this site 1976 to 1977.	26.4	1976-78	9- 5-78 9-28-78	6.87 3.26
		MUSKINGUM RIVER BASIN				
03115890	Tuscarawas River at Uniontown, OH	Lat 40°59'18", long 81°24'08", Stark County, Hydrologic Unit 05040001, at culvert on Pontius Street, 0.9 mi (1.4 km) north of Uniontown. Water-quality data collected at this site 1974 to 1977.	8.26	1974-78	9-27-78	2.90
03115900	Tuscarawas River near East Liberty, OH	Lat 41°00'25", long 81°29'31", Summit County, Hydrologic Unit 05040001, at bridge on Arlington Road, 2.3 mi (3.7 km) north of East Liberty. Water-quality data collected at this site 1965 to 1977.	33.1	1960-67 1969-78	9037-78	8.72
03115920	Tuscarawas River at Barberton, OH	Lat 41°01'40", long 81°35'15", Summit County, Hydrologic Unit 05040001, at bridge on East State Street in Barberton. Water-quality data collected at this site 1974 to 1977.	72.5	1947, 1951, 1974-78	9-27-78	33.2
03115990	Wolf Creek near Barberton, OH	Lat 41°02'56", long 81°36'00", Summit County, Hydrologic Unit 05040001, at bridge on Summit Road, 200 ft (61 m) downstream from mouth of Pigeon Creek, 2.5 mi (4.0 km) north of Barberton. Water-quality data collected at this site 1974 to 1977.	53.9	1950, 1960-61 1974-78	9-27-78	5.52
03116075	Chippewa Creek at Seville, OH	Lat 41°00'36", long 81°51'53", Medina County, Hydrologic Unit 05040001, at bridge on State Highway 3 in Seville. Water-quality data collected at this site 1967 to 1977.	44.0	1976-78	9-27-78	2.68
03116080	Chippewa Creek at Sterling, OH	Lat 40°57'24", long 81°50'31", Wayne County, Hydrologic Unit 05040001, at bridge on County Road 60, 0.8 mi (1.3 km) south of Sterling. Water-quality data collected at this site 1974-1977.	64.6	1974-78	9-27-78	3.80
03116410	Nimisila Creek near Canal Fulton, OH	Lat 40°54'57", long 81°33'43", Summit County, Hydrologic Unit 05040001, at bridge on State Highway 93, 2.5 mi (4.0 km) northeast of Canal Fulton. Water-quality data collected at this this site 1974 to 1977.	23.1	1960-61 1974-78	9-27-78	5.92

LOW-FLOW PARTIAL-RECORD STATIONS.--Continued

Discharge measurements made at low-flow partial-record stations during water year 1978.--Continued

Station No	Station name	Location	Drainage area (mi²)	Period of record	Measurements Date	Measurements Discharge (cfs)
		MUSKINGUM RIVER BASIN--Continued				
03116950	Newman Creek near Massillon, OH	Lat 40°49'22", long 81°33'06", Stark County, Hydrologic Unit 05040001, at bridge on Beaumont Avenue, 119 mi (3.1 km) upstream from mouth, 2 mi (3 km) northwest of Massillon. Water-quality data collected at this site 1976 to 1977.	38.2	1976-78	9-25-78	1.89
03117150	Sandy Creek at Minerva, OH	Lat 40°43'53", long 81°05'57", Stark County, Hydrologic Unit 05040001, at bridge on U.S. Highway 30 in Minerva. Water-quality data collected at this site 1974 to 1977.	61.9	1974-78	9-25-78	8.69
03117160	Still Fork near Minerva, OH	Lat 40°39'49", long 81°02'24", Carroll County, Hydrologic Unit 05040001, at bridge on State Highway 9, 1.4 mi (2.3 km) downstream from Pipes Fork, 5.5 mi (8.8 km) southeast of Minerva. Water-quality data collected at this site 1974 to 1977.	36.2	1974-78	9-25-78	2.40
03117280	Nagle Run near Malvern, OH	Lat 40°42'49", long 81°09'03", Carroll County, Hydrologic Unit 05040001, at bridge on private road, 1,000 ft (300 m) upstream from mouth, 2.2 mi (3.5 km) northeast of Malvern. Water-quality data collected at this site 1976 to 1977.	21.3	1976-78	9-25-78	4.98
03117300	Sandy Creek at Malvern, OH	Lat 40°41'27", long 81°10'50", Carroll County, Hydrologic Unit 05040001, at bridge on State Highway 43 and 183, in Malvern. Water-quality data collected at this site 1976 to 1977.	163	1976-78	9-25-78	32.8
03117310	Pipe Run at Malvern, OH	Lat 40°41'16", long 81°11'02", Carroll County, Hydrologic Unit 05040001, at bridge in Malvern, 200 ft (60 m) upstream from mouth. Water-quality data collected at this site 1976 to 1977.	27.7	1976-78	9-25-78	0.75
03117450	Little Sandy Creek near Robertsville, OH	Lat 40°44'03", long 81°14'40", Stark County, Hydrologic Unit 05040001 at bridge on Hillchurch-Wynnfield Drive, 0.7 mi (1.1 km) downstream from Black Run, 3.5 mi (5.6 km) southwest of Robertsville, and 4.8 mi (7.7 km) upstream from mouth. Water-quality data collected at this site 1976 to 1977.	29.7	1976-78	9-25-78	6.98
03118100	East Branch Nimishillen Creek near Canton, OH	Lat 40°49'24", long 81°17'55", Stark County, Hydrologic Unit 05040001, at bridge on Broadway Avenue, 1 mi (1.6 km) east of Canton city limits 3.5 mi (5.6 km) upstream from Middle Branch. Water-quality data collected at this site 1974 to 1977.	33.4	1974-78	9-25-78	6.06
03118300	West Branch Nimishillen Creek at Canton, OH	40°47'48", long 81°23'26", Stark County, Hydrologic Unit 05040001, at bridge on Sixth Street, 1.3 mi (2.1 km) upstream from mouth at Canton. Water-quality data collected at this site 1974 to 1977.	43.9	1974-78	9-25-78	9.28
03119580	Tuscarawas River at Zoar, OH	Lat 40°36'28", long 81°25'36", Tuscarawas County, Hydrologic Unit 05040001, at bridge on County Road 82, 0.5 mi (0.8 km) southwest of Zoar, 3 mi (5 km) upstream from Conotton Creek. Water-quality data collected at this site 1974 to 1977.	1,102	1974-78	9-26-78	329
03121600	Conotton Creek at New Cumberland, OH	Lat 40°32'30", long 81°18'27", Tuscarawas County, Hydrologic Unit 05040001, at bridge on State Highway 212, 0.4 mi (0.6 km) Southwest of New Cumberland, 3.0 mi (4.8 km) downstream from Indian Fork. Water-quality data collected at this site 1976 to 1977.	250	1935,1965 1974-78	9-25-78	49.1

LOW-FLOW PARTIAL-RECORD STATIONS.--Continued

Discharge measurements made at low-flow partial-record stations during water year 1978.--Continued

Station No	Station name	Location	Drainage area (mi^2)	Period of Record	Measurements Date	Measurements Discharge (cfs)
		MUSKINGUM RIVER BASIN--Continued				
03122850	Sugar Creek near Orrville, OH	Lat 40°48'43", long 81°45'56", Wayne County, Hydrologic Unit 05040001, at bridge on State Highway 57, 2 mi (3 km) south of Orrville. Water-quality data collected at this site 1976 to 1977.	47.2	1959, 1976-78	9-26-78	2.52
03122900	Sugar Creek near West Lebanon, OH	Lat 40°44'12", long 81°39'12", Wayne County, Hydrologic Unit 05040001, at bridge on county road, 1.1 mi (1.8 km) northwest of West Lebanon. Water-quality data collected at this site 1976 to 1977.	69.8	1973, 1976-78	9-26-78	4.74
03124520	Sugar Creek at Dover, OH	Lat 40°31'40", long 81°29'43", Tuscarawas County, Hydrologic Unit 05040001, at bridge on State Highway 39, 0.2 mi (0.3 km) west of Dover City limits, 1.8 mi (2.9 km) upstream from mouth. Water-quality data collected at this site 1974 to 1977.	348	1940, 1974-78	9-26-78	51.9
03127100	Crooked Creek near Stillwater, OH	Lat 40°18'29", long 81°19'26", Tuscarawas County, Hydrologic Unit 05040001, at bridge on State Highway 258, 0.7 mi (1.1 km) upstream from mouth, 1.2 mi (1.9 km) southwest of Stillwater. Water-quality data collected at this site 1974 to 1977.	47.5	1974-78	9-28-78	3.55
03128600	Little Stillwater Creek near Dennison, OH	Lat 40°24'19", long 81°17'18" Tuscarawas County, Hydrologic Unit 05040001, at county road bridge, 1.3 mi (2.1 km) upstream from Irish Run, 2.5 mi (4.0 km) east of Dennison. Water-quality data collected at this site 1974 to 1977.	96.4	1974-78	9-26-78	15.2
03128700	Tuscarawas River at Tuscarawas, OH	Lat 40°23'37", long 81°23'26", Tuscarawas County, Hydrologic Unit 05040001, at bridge on County Road 62, 0.4 mi (0.6 km) east of Tuscarawas, 2.6 mi (4.2 km) downstream from Stillwater Creek. Water-quality data collected at this site 1974 to 1977.	2,367	1974-78	9-26-78	672
03129150	Tuscarawas River at Coshocton, OH	Lat 40°16'44", long 81°52'15", Coshocton County, Hydrologic Unit 05040001, at bridge on Bridge Street at Coshocton city limits, 0.3 mi (0.5 km) upstream from confluence with Walhonding River. Water-quality data collected at this site 1974 to 1977.	2,596	1974-78	9-26-78	739
03134300	Muddy Fork near Rowsburg, OH	Lat 40°50'10", long 82°08'16", Ashland County, Hydrologic Unit 05040002, at bridge on Township Road 1550, 1.8 mi (2.9 km) southeast of Rowsburg. Water-quality data collected at this site 1972 to 1977.	66.2	1972-78	9-29-78	0.64
03138790	Killbuck Creek at Burbank, OH	Lat 40°59'24", long 81°59'41", on Wayne-Medina county line, Hydrologic Unit 05040003, at bridge on State Highway 83 at Burbank. Water-quality data collected at this site 1976 to 1977.	42.4	1976-78	9- 6-78 9-28-78	1.30 0.91
03138820	Apple Creek at Wooster, OH	Lat 40°48'13", long 81°54'20", Wayne County, Hydrologic Unit 05040003, at bridge on Hillcrest Road, 0.5 mi (0.8 km) upstream from Little Apple Creek, at Wooster. Water-quality data collected at this site 1976 to 1977.	33.7	1959, 1976-78	6-28-77 9-28-78	6.55 4.19
03150480	West Branch Wolf Creek near Waterford, OH	Lat 39°31'43", long 81°39'22", Washington County, Hydrologic Unit 05040004, adjacent to State Highway 339, 400 ft (122 m) upstream from South Branch, 1.2 mi (1.9 km) southwest of Waterford. Water-quality data collected at this site 1972 to 1977.	144	1959 1972-78	9-26-78	4.06

LOW-FLOW PARTIAL-RECORD STATIONS.--Continued

Discharge measurements made at low-flow partial-record stations during water year 1978.--Continued

Station No	Station name	Location	Drainage area (mi^2)	Period of record	Date	Discharge (cfs)
		CAMPAIGN CREEK BASIN				
03160105	Campaign Creek near Gallipolis, OH	Lat 39°53'51", long 82°11'31", Gallia County, Hydrologic Unit 05030202, at bridge on Bulaville-Porter Road, 5.6 mi (9.0 km) upstream from mouth, 5.8 mi (9.3 km) north of Gallipolis. Water-quality data collected at this site 1976 to 1977.	35.5	1976-78	9-20-78	6.09
		ICE CREEK BASIN				
03216050	Ice Creek at Ironton, OH	Lat 38°31'05", long 82°38'09", Lawrence County, Hydrologic Unit 05090103, at bridge on private road, 0.6 mi (1.0 km) east of city limits of Ironton, 2 mi (3 km) upstream from mouth. Water-quality data collected at this site 1976 to 1977.	37.2	1976-78	9-27-78	0.84
		BIG THREEMILE CREEK BASIN				
03238020	Big Threemile Creek near Aberdeen, OH	Lat 38°40'22", long 83°44'52", Brown County, Hydrologic Unit 05090201, at bridge on State Highway 763, 1.4 mi (2.3 km) northeast of Aberdeen, and 4.4 mi (7.1 km) upstream from mouth. Water-quality data collected at this site 1977.	19.7	1977-78	9-30-78	0.08
		STRAIGHT CREEK BASIN				
03238250	Straight Creek near Higginsport, OH	Lat 38°47'56", long 83°48'20", Brown County, Hydrologic Unit 05090201, at bridge on Straight Creek Road, 2.8 mi (4.5 km) upstream from mouth, and 3 mi (5 km) east of Higginsport. Water-quality data collected at this site 1976 to 1977.	57.3	1976-78	9-30-78	0.09
		BULLSKIN CREEK BASIN				
03238650	Bullskin Creek near Felicity, OH	Lat 38°48'02", long 84°03'21", Clermont County, Hydrologic Unit 05090201, at bridge on Felicity Cedron Road, just upstream from unnamed tributary on left bank, 0.3 mi (0.5 km) downstream from Slickaway Run, and 3.3 mi (5.3 km) southeast of Felicity. Water-quality data collected at this site 1976 to 1977.	47.7	1976-78	9-30-78	0.05
		INDIAN CREEK BASIN				
03238730	Indian Creek near Point Pleasant, OH	Lat 38°53'24", long 84°12'29", Clermont County, Hydrologic Unit 05090201, at bridge on State Highway 232, 1.4 mi (2.3 km) east of Point Pleasant, 1.6 mi (2.6 km) upstream from mouth. Water-quality data collected at this site 1976 to 1977.	38.7	1976-78	9-30-78	0.88

CREST-STAGE PARTIAL-RECORD STATIONS

The following table contains annual maximum discharge for crest-stage stations. A crest-stage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, and discharge measurements may have been made for purposes of establishing the stage-discharge relation, but these are not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1978

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum Date	Gage height (feet)	Discharge (ft³/s)
		Beaver River basin					
03092099	Hinkley Creek at Charlestown, OH	Lat 41°09'16", long 81°08'51", Portage County, Hydrologic Unit 05030103, at bridge on Rock Spring Road, 0.6 mi (1.0 km) south of Charlestown, 2.2 mi (3.5 km) upstream from mouth.	7.85	1970-78	3-27-78	11.90	380
03098700	Crab Creek at Youngstown, OH	Lat 41°07'20", long 80°38'08", Mahoning County, Hydrologic Unit 05030103, at bridge on Hubbard Road at Youngstown, 2 mi (3.2 km) upstream from mouth.	14.0	1959-78	12-14-77	6.34	690
		Little Beaver Creek basin					
03109000	Lisbon Creek at Lisbon, OH	Lat 40°46'55", long 80°45'53", Columbiana County, Hydrologic Unit 05030101, at city water works of Lisbon, 800 feet (244 m) upstream from bridge on State Highway 164.	6.19	1947-62#, 1963-78	12- 6-77	4.47	525
		Cross Creek basin					
03110980	Consol Run at Bloomingdale, OH	Lat 40°19'56", long 80°48'44", Jefferson County, Hydrologic Unit 05030101, at culvert on Township Road, 0.8 mi (1.3 km) southeast of Bloomingdale.	.04	1978	7-14-78	102.60	14
		Short Creek basin					
03111450	Branson Run at Georgetown, OH	Lat 40°12'26", long 80°55'22", Harrison County, Hydrologic Unit 05030101, at culvert on County Highway 41, 300 ft (91 m) southwest from intersection with U.S. Highway 250 in Georgetown.	1.31	1978	6- 7-78	96.89	134
03111455	South Fork Short Creek at Georgetown, OH	Lat 40°12'27", long 80°55'12", Harrison County, Hydrologic Unit 05030101, at bridge on U.S. Highway 250 in Georgetown.	10.9	1978	6- 8-78	87.51	360
03111470	Little Piney Fork at Parlett, OH	Lat 40°18'07", long 80°50'55", Jefferson County, Hydrologic Unit 05030101, at culvert on State Route 151, 0.9 mi (1.4 km) east of Parlett.	1.57	1978	7-14-78	97.59	2[illegible]0
03111490	Piney Fork tributary near Piney Fork, OH	Lat 40°16'18", long 80°50'48", Jefferson County, Hydrologic Unit 05030101, at culvert on County Road 12, 0.08 mi (0.13 km) east of Penn Central Railroad crossing on Smithfield-Adena Road, 1.6 mi (2.6 km) northwest of Piney Fork and 3.0 mi (4.8 km) west of Smithfield.	.44	1978	7-14-78	99.60	73
		Wheeling Creek basin					
03111540	Sloan Run tributary near Harrisville, OH	Lat 40°09'07", long 80°52'59", Belmont County, Hydrologic Unit 05030106, at culvert on unnamed B & P Coal Company private road, 1.7 mi (2.7 km) south of Harrisville, and 2.1 mi (3.4 km) west of Pleasant Grove.	.34	1978	8- 8-78	103.22	180
		Sunfish Creek basin					
03114240	Wood Run near Woodsfield, OH	Lat 39°46'56", long 81°03'21", Monroe County, Hydrologic Unit 05030201, at culvert under State Highway 26, 0.5 mi (0.8 km) upstream from Standing Stone Run, and 3.5 mi (5.6 km) northeast of Woodsfield.	.53	1978	1-25-78	96.95	64

CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum Date	Gage height (feet)	Discharge (ft³/s)
		Little Muskingum River basin					
03115280	Trail Run near Antioch, OH	Lat 39°37'29", long 81°02'54", Monroe County, Hydrologic Unit 05030201, at private road bridge, adjacent to State Route 800, 2.7 mi (4.3 km) southeast of Antioch.	5.45	1978	3-12-78	93.75	480
03115410	Graham Run near Bloomfield, OH	Lat 39°32'36", long 81°12'32", Washington County, Hydrologic Unit 05030201, at culvert on State Highway 26, 0.25 mi (0.40 km) upstream from mouth, and 1.2 mi (1.9 km) southwest of Bloomfield.	.13	1978	3-12-78	97.13	6.6
03115510	Moss Run near Wingett, OH	Lat 39°28'24", long 81°18'52", Washington County, Hydrologic Unit 05030201, at culvert on State Route 26 at Moss Run and 8 mi (13 km) southwest of Wingett.	1.30	1978	6- 8-78	89.95	170
		Duck Creek basin					
03115600	Barnes Run near Summerfield, OH	Lat 39°46'20", long 81°22'26", Noble County, Hydrologic Unit 05030201, at bridge on county road adjacent to State Highway 78, 2.5 mi (4.0 km) southwest of Summerfield.	3.46	1947-78	6-27-78	11.84	550
03115710	Buffalo Run tributary near Dexter City, OH	Lat 39°31'41", long 81°26'58", Noble County, Hydrologic Unit 05030201, at culvert on County Road 2, 1.3 mi (2.1 km) east of Dexter City.	.19	1978	3-12-78	96.50	38
		Muskingum River basin					
03119700	Conotton Creek at Jewett, OH	Lat 40°21'59", long 81°00'13", Harrison County, Hydrologic Unit 05040001, at bridge on State Highway 9 in Jewett.	14.3	1947-78	7-14-78	12.91	690
03123400	Dundee Creek at Dundee, OH	Lat 40°35'35", long 81°36'13", Tuscarawas County, Hydrologic Unit 05040001, at culvert on State Highway 93, 0.4 mi (0.6 km) upstream from mouth, 0.5 mi (0.8 km) northeast of Dundee.	.71	1966-78	10-1-77	25.00	218
03125850	Robinson Run near Hendrysburg, OH	Lat 40°05'08", long 81°10'27", Belmont County, Hydrologic Unit 05040001, at culvert on County Road 108, 1.7 mi (2.7 km) north of Hendrysburg.	1.97	1978	6-28-78	101.24	147
03127950	Clear Fork near Jewett, OH	Lat 40°19'28", long 81°01'20", Harrison County, Hydrologic Unit 05040001, at bridge 150 ft (46 m) north of County Road 13, 0.5 mi (0.8 km) east of State Route 9, and 3.1 mi (5.0 km) south of Jewett.	5.45	1978	7-14-78	97.76	300
03128650	Mud Run tributary at Wainwright, OH	Lat 40°25'07", long 81°24'57", Tuscarawas County, Hydrologic Unit 05040001, at culvert on Warwick Township Road 461, 0.5 mi (0.8 km) west of State Route 416, and 0.7 mi (1.1 km) east of Wainwright.	.55	1978	12-14-77	99.52	11
03138900	Jennings Ditch tributary near Wooster, OH	Lat 40°44'45", long 81°55'48", Wayne County, Hydrologic Unit 05040003, at culvert on State Highway 83, 0.8 mi (1.3 km) upstream from mouth, 4 mi (6.4 km) south of Wooster.	.90	1946, 1966-78	6-19-78	20.53	195
03144800	Etna Creek at Etna, OH	Lat 39°58'08", long 82°40'55", Licking County, Hydrologic Unit 05040006, at culvert on State Highway 310, 0.7 mi (1.1 km) north of Etna.	1.10	1966-78	6- 8-78	11.40	114
03148300	Moxahala Creek at Roseville, OH	Lat 39°48'38", long 82°04'13", Muskingum County, Hydrologic Unit 05040004, at pumping station about 2,500 ft (762 m) downstream from First Street bridge in Roseville.	80.6	1964-78	1- 9-78	11.82	2,160
03150600	Tupper Creek at DeVola, OH	Lat 39°28'24", long 81°27'58", Washington County, Hydrologic Unit 05040004, at culvert on State Highway 60 at DeVola.	.99	1966-78	12-5-77	8.61	65

CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum: Date	Annual maximum: Gage height (feet)	Annual maximum: Discharge (ft³/s)
		Hocking River basin					
03158220	Glen Run near Doanville, OH	Lat 39°24'06", long 82°11'44", Athens County, Hydrologic Unit 05030204, at culvert on County Road 4, 0.8 mi (1.3 km) west of U.S. Highway 33, and 2.3 mi (3.7 km) south of Doanville.	1.09	1978	3-14-78	95.17	40
03159450	Mill Creek near Chauncey, OH	Lat 39°22'46", long 82°05'08", Athens County, Hydrologic Unit 05030204, at Culvert on U.S. Highway 50, 200 ft (61 m) above mouth, 4.5 mi (7.2 km) north of Athens, and 3.0 mi (4.8 km) southeast of Chauncey.	1.48	1978	3-14-78	93.84	55
		Raccoon Creek basin					
03201550	Starr Run near New Plymouth, OH	Lat 39°23'46", long 82°20'49" Hocking County, Hydrologic Unit 05090101, at culvert on State Route 56, 0.8 mi (1.3 km) east of State Route 328, and 3.0 mi (4.8 km) east of New Plymouth.	.30	1978	3-14-78	96.36	24
		Charlie Creek basin					
03205995	Sandusky Creek near Burlington, OH	Lat 38°25'03", long 82°30'36", Lawrence County, Hydrologic Unit 05090101, at culvert on U.S. Highway 52, 0.35 mi (0.55 km) west of Charley Creek Road, and 1.25 mi (2.00 km) northeast of Burlington.	.73	1978	1-26-78	97.18	75
		Scioto River basin					
03221900	Dry Run at Columbus, OH	Lat 39°57'22", long 83°06'19", Franklin County, Hydrologic Unit 05060001, at culvert in Westinghouse employees parking lot at entrance to plant, 1,000 ft (305 m) north of U.S. Highway 40, near west edge of Columbus.	1.91	1965-78	7- 2-78	20.69	405
03226890	Turkey Run at Upper Arlington, OH	Lat 40°02'10", long 83°04'06", Franklin County, Hydrologic Unit 05060001, at culvert on Lytham Road at Upper Arlington.	.90	1972-78	10-1-77	17.15	270
03226900	Fishinger and Kenny Road Creek at Upper Arlington, OH	Lat 40°01'27", long 83°02'38", Franklin County, Hydrologic Unit 05060001, at culvert on Kenny Road at Upper Arlington.	.45	1964-78	10-1-78	17.96	193
03228000	Scioto Big Run at Briggsdale, OH	Lat 39°54'56", long 83°03'55", Franklin County, Hydrologic Unit 05060001, at bridge on U.S. Highway 62 at Briggsdale 2.8 mi (4.5 km) northeast of Grove City 4 mi (6 km) upstream from mouth.	11.0	1947-58#, 1959-78	1-20-78	6.09	890
03231600	East Fork Paint Creek near Sedalia, OH	Lat 39°42'36", long 83°27'48", Madison County, Hydrologic Unit 05060003, at culvert on State Highway 38, 1.8 mi (2.896 m) southeast of Sedalia.	3.82	1947-78	3-26-78	14.55	540
03235080	Bull Creek near Adelphi, OH	Lat 39°27'11", long 82°46'46", Ross County, Hydrologic Unit 05060002, at culvert on State Route 180, 1.9 mi (3.1 km) southwest of Adelphi.	3.13	1978	3- 1-78	68.45	170
03235200	Little Blackjack Branch near South Bloomingville, OH	Lat 39°27'23", long 82°30'25", Hocking County, Hydrologic Unit 05060002, at culvert on State Highway 664, 5.5 mi (8.8 km) northeast of South Bloomingville.	.89	1966-78	3-15-78	18.97	74
03235995	Salt Creek above dam site near Londonderry, OH	Lat 39°17'26", long 82°44'45", Vinton County, Hydrologic Unit 05060002, at bridge on State Highway 671, 0.5 mi (0.8 km) east of Ross County line, 2.8 mi (4.5 km) northeast of Londonderry.	268	1963-78	5- 8-78	15.99	11,500
03236090	South Branch Little Salt Creek near Jackson, OH	Lat 39°00'50", long 82°39'01", Jackson County, Hydrologic Unit 05010002, at culvert on State Highway 124, 300 ft (90 m) east of State Highway 139, and 2.7 mi (4.3 km) south of Jackson.	1.28	1978	6-19-78	97.44	420

CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum Date	Gage height (feet)	Discharge (ft³/s)
		Scioto River basin--Continued					
03237095	Beavers Run at Lucasville, OH	Lat. 38°52'54", long. 83°01'13" Scioto County, Hydrologic Unit 05060002, at culvert on State Highway 104, 300 ft (91 m) north of State Highway 348, and 1.2 mi (1.9 km) northwest of Lucasville.	1.22	1978	1-25-78	94.37	218
03237210	Rose Run near Portsmouth, OH	Lat 38°48'07", long 82°59'03", Scioto County, Hydrologic Unit 05060002, at culvert on U.S. Highway 23, 2.9 mi (4.67 m) north of Portsmouth city limits.	1.04	1966-78	1-26-78	15.47	95
		Ray Run basin					
03238700	Ray Run near Moscow, OH	Lat 38°51'15", long 84°12'00", Clermont County, Hydrologic Unit 05090201, at culvert on State Highway 743, 1.5 mi (2.41 km) east of Moscow.	.86	1966-78	3-26-78	20.09	110
		Little Miami River basin					
03242100	Wayne Creek at Waynesville, OH	Lat 39°31'08", long 84°04'47", Warren County, Hydrologic Unit 05090202, at culvert on State Highway 73, 0.8 mi (1.28 km) southeast of intersection of State Highway 73 and U.S. Highway 42 at Waynesville.	1.01	1966-78	3-26-78	20.50	165
03248000	Little Miami River at Plainville, OH	Lat 39°08'13", long 84°21'11", Hamilton County, Hydrologic Unit 05090202, at bridge on Newton Road, 0.5 mi (0.80 km) east of Plainville, 0.7 mi (1.13 km) northeast of Newton, 3.5 mi (5.63 km) downstream from East Fork, and 8.2 mi (13.2 km) upstream from mouth.	1,713	1914-15#, 1918-20, 1965-71#, 1972-78	3-15-78	24.99	35,500
		Great Miami River basin					
03262750	Millers Ditch at Tipp City, OH	Lat 39°57'59", long 84°10'22", Miami County, Hydrologic Unit 05080001, at culvert on 4th Street in Tipp City.	.83	1966-78	8- 3-78	13.68	136
03272695	Trippets Branch at Camden, OH	Lat 39°38'03", long 84°39'08" Preble County, Hydrologic Unit 05080002, at culvert on U.S. Highway 127, 0.3 mi (0.5 km) north of State Highway 725 at Camden.	.33	1978	12-14-77	97.12	78
03272900	Collins Creek at Collinsville, OH	Lat 39°31'05", long 84°36'53", Butler County, Hydrologic Unit 05090002, at culvert on U.S. Highway 127, 0.3 mi (0.48 km) upstream from mouth, 0.4 mi (0.64 km) northwest of Collinsville.	.94	1966-78	10-1-77	20.94	242
03274100	Blake Run near Reily, OH	Lat 39°27'59", long 84°45'22", Butler County, Hydrologic Unit 05090002, 600 feet (183 m) upstream from culvert on Stevenson Road, 2.2 mi (3.54 km) north of Reily, 3 mi (4.83 km) upstream from mouth.	.29	1939-40 1942-43, 1947-78	12-14-77	2.69	24

* Also a low-flow partial-record station.
\# Operated as a continuous-record gaging station.
< Less than.

The following tables contain water-level and chemical quality data for network observation wells. The wells were pumped in order to get water samples representative of the aquifer. In addition, chemical quality data for a selected number of water-supply wells is given.

ATHENS COUNTY

391934082065000. Local number, AT-10.
LOCATION.--Lat 39°19'34", long 82°06'50", Hydrologic Unit 05030204, 0.3 mi (0.5 km) south of fairgrounds in Athens.
Owner: City of Athens.
AQUIFER.--Sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled public supply water-table well, diameter 26 in (0.66 m), depth 52 ft (15.8 m), screened below 35 ft (10.7 m).
PERIOD OF RECORD.--June 1967 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	FLOW RATE (GPM)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)
NOV												
14...	400	1110	7.1	13.5	15	100	31	58	336	0	280	43
APR												
11...	400	997	7.2	--	7	96	25	47	286	0	230	29

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
NOV												
14...	140	130	740	.00	.00	.00	.21	.01	10	4100	0	580
APR												
11...	140	99	667	.00	.00	.00	.21	.00	<10	3600	0	460

ATHENS COUNTY--Continued

392004082071600. Local number, AT-2A.
LOCATION.--Lat 39°20'04", long 82°07'16", Hydrologic Unit 05030204, 1.1 mi (1.8 km) west of city hall in Athens. Owner: City of Athens.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Unused drilled water-table well, diameter 12 in (0.3 m), depth 35.5 ft (10.8 m), cased.
DATUM.--Altitude of land-surface datum is 641.81 ft (195.624 m). Measuring point: Floor of instrument shelter, 5.80 ft (1.768 m) above land-surface datum.
REMARKS.--Prior to water year 1978, well depth reported as 43 ft (13.1 m).
PERIOD OF RECORD.--March 1954 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 20.00 ft (6.096 m) Oct. 4, 1955; minimum daily low, 1.05 ft (0.320 m) May 25, 28, 1968.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 19.23 ft (5.861 m) Nov. 17; minimum daily low, 14.58 ft (4.444 m) Mar. 29.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.01	19.12	19.16	18.55	16.65	17.34	14.83	15.99	15.90	16.87	17.81	18.50
2	19.01	19.14	19.12	18.60	16.55	17.33	14.88	16.04	15.98	16.90	17.82	18.49
3	18.98	19.15	19.03	18.64	16.55	17.38	14.96	16.07	16.04	16.92	17.86	18.52
4	18.91	19.17	18.97	18.66	16.53	17.43	15.07	16.11	16.06	16.95	17.89	18.55
5	18.88	19.18	18.91	18.69	16.53	17.45	15.12	16.13	16.14	16.98	17.91	18.58
6	18.87	19.19	18.80	18.72	16.56	17.49	15.19	16.10	16.17	17.01	17.93	18.61
7	18.87	19.20	18.64	18.74	16.60	17.52	15.25	16.05	16.22	17.05	17.93	18.65
8	18.85	19.21	18.51	18.73	16.61	17.54	15.24	16.02	16.24	17.08	17.87	18.68
9	18.85	19.21	18.42	18.61	16.62	17.56	15.26	15.95	16.13	17.06	17.81	18.72
10	18.85	19.22	18.40	18.39	16.65	17.61	15.28	15.78	15.96	17.11	17.78	18.75
11	18.81	19.22	18.37	18.23	16.69	17.60	15.41	15.69	15.90	17.14	17.80	18.78
12	18.80	19.21	18.35	18.12	16.72	17.55	15.45	15.63	15.97	17.17	17.82	18.83
13	18.80	19.21	18.36	18.03	16.73	17.43	15.57	15.59	16.07	17.20	17.84	18.87
14	18.81	19.20	18.36	17.98	16.84	17.00	15.62	15.49	16.12	17.24	17.82	18.91
15	18.84	19.21	18.31	18.01	16.86	16.58	15.70	15.34	16.19	17.27	17.84	18.93
16	18.87	19.22	18.18	18.02	16.88	16.15	15.76	15.29	16.24	17.31	17.89	18.96
17	18.89	19.23	18.08	18.01	16.92	15.74	15.81	15.27	16.29	17.36	17.92	18.99
18	18.91	19.22	18.02	18.05	16.95	15.47	15.86	15.29	16.37	17.40	17.89	19.01
19	18.95	19.21	18.02	18.01	16.99	15.28	15.86	15.33	16.40	17.43	17.95	19.03
20	18.96	19.19	18.05	18.00	17.03	15.23	15.78	15.40	16.38	17.48	18.01	19.06
21	18.98	19.21	18.07	18.01	17.06	15.21	15.75	15.51	16.34	17.52	18.06	19.07
22	18.99	19.22	18.11	18.00	17.10	15.20	15.74	15.56	16.40	17.55	18.12	19.08
23	19.01	19.18	18.14	17.99	17.12	15.25	15.69	15.62	16.44	17.60	18.16	19.08
24	19.02	19.14	18.15	17.97	17.14	15.26	15.77	15.70	16.49	17.63	18.21	19.07
25	19.03	19.12	18.22	17.94	17.20	15.26	15.84	15.76	16.54	17.64	18.27	19.09
26	19.05	19.14	18.27	17.87	17.24	15.20	15.83	15.82	16.60	17.66	18.32	19.10
27	19.06	19.14	18.34	17.59	17.25	14.95	15.79	15.88	16.67	17.70	18.37	19.13
28	19.08	19.18	18.37	17.33	17.28	14.71	15.84	15.94	16.71	17.74	18.42	19.14
29	19.09	19.19	18.41	17.11	---	14.58	15.87	16.00	16.76	17.76	18.45	19.14
30	19.10	19.18	18.46	16.92	---	14.59	15.93	15.98	16.82	17.79	18.48	19.13
31	19.11	---	18.50	16.74	---	14.62	---	15.87	---	17.80	18.50	---
MAX	19.11	19.23	19.16	18.74	17.28	17.61	15.93	16.13	16.82	17.80	18.50	19.14

WTR YR 1978 MEAN 17.47 HIGH 14.58 LOW 19.23

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
JUN 28...	1130	810	7.7	12.0	.0	330	160	82	30	30	2.4

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
JUN 28...	200	0	164	6.4	160	46	.2	8.8	530	459	.14

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
JUN 28...	.19	.10	.29	.43	1.9	.09	.00	160	570	1.8

403233083574500. Local number, AU-3.
LOCATION.--Lat 40°32'33", long 83°57'45", Hydrologic Unit 05080001, 1.0 mi (1.6 km) southwest of New Hampshire.
Owner: State of Ohio.
AQUIFER.--Limestone of Silurian Age.
WELL CHARACTERISTICS.--Drilled test artesian well, diameter 12 in (0.3 m), depth 380 ft (115.8 m), cased to 52 ft (15.8 m).
DATUM.--Altitude of land-surface datum is 1,020 ft (311 m), from topographic map. Measuring point: Floor of instrument shelter, 3.00 ft (0.914 m) above land-surface datum.
PERIOD OF RECORD.--December 1974 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 11.87 ft (3.618 m) Feb. 7-8, 1977; minimum daily low, 5.51 ft (1.679 m) June 15, 1978.
EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 9.54 ft (2.908 m) Oct. 3; minimum daily low, 5.51 ft (1.679 m) June 15.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.47	---	8.63	7.56	7.14	7.44	6.55	6.07	6.10	6.13	7.05	7.78
2	9.51	---	8.68	7.55	7.13	7.42	6.70	6.09	6.13	6.08	7.08	7.77
3	9.54	---	8.66	7.67	7.17	7.39	6.59	6.09	6.18	6.07	7.10	7.76
4	---	---	8.67	7.65	7.17	7.49	6.58	6.00	6.18	6.12	7.17	7.81
5	---	---	8.60	7.63	7.10	7.45	6.60	6.10	6.23	6.18	7.19	7.83
6	---	---	8.55	7.62	7.05	7.60	6.47	6.22	6.28	6.22	7.23	7.85
7	---	---	8.60	7.58	7.10	7.60	6.51	6.22	6.20	6.21	7.18	7.88
8	---	---	8.60	7.47	7.10	7.56	6.51	6.08	6.25	6.23	7.20	7.91
9	---	---	8.58	7.47	7.08	7.53	6.44	6.11	6.36	6.25	7.21	7.97
10	---	8.88	8.63	7.57	7.05	7.49	6.30	6.22	6.38	6.30	7.25	8.00
11	---	8.96	8.63	7.65	7.04	7.51	6.25	6.23	6.39	6.34	7.27	8.02
12	---	9.05	8.53	7.61	7.04	7.59	6.26	6.16	6.38	6.37	7.29	8.03
13	---	9.11	8.42	7.44	6.99	7.59	6.32	6.00	6.44	6.39	7.35	8.07
14	---	9.06	8.26	7.37	7.07	7.43	6.38	6.01	6.48	6.42	7.38	8.06
15	---	8.94	8.27	7.44	7.10	7.44	6.41	6.05	5.51	6.45	7.34	8.11
16	---	8.85	8.21	7.44	7.11	7.37	6.40	6.07	5.57	6.50	7.33	8.08
17	---	8.83	8.14	7.41	7.14	7.37	6.39	6.05	5.63	6.58	7.39	8.11
18	---	8.97	8.06	7.42	7.13	7.37	6.31	6.08	5.65	6.66	7.44	8.18
19	---	9.00	8.05	7.41	7.16	7.29	6.14	6.12	5.70	6.74	7.49	8.22
20	---	8.96	7.96	7.31	7.19	7.23	6.14	6.07	5.71	6.79	7.55	8.25
21	---	9.00	7.94	7.39	7.22	7.10	6.19	6.13	5.77	6.79	7.56	8.29
22	---	9.03	7.89	7.42	7.23	7.07	6.23	6.14	5.83	6.84	7.56	8.37
23	---	8.92	7.89	7.44	7.18	7.05	6.14	6.06	5.85	6.85	7.57	8.40
24	---	8.89	7.85	7.40	7.18	7.07	6.11	6.03	5.85	6.85	7.57	8.42
25	---	8.88	7.69	7.23	7.26	6.92	6.08	6.06	5.85	6.86	7.59	8.45
26	---	8.80	7.73	6.94	7.34	6.80	6.07	6.07	5.88	6.84	7.62	8.48
27	---	8.85	7.72	7.13	7.36	6.78	6.09	6.07	5.93	6.84	7.64	8.46
28	---	8.89	7.76	7.15	7.34	6.74	6.06	6.02	6.01	6.91	7.60	8.53
29	---	8.96	7.73	7.17	---	6.75	6.04	5.99	6.07	6.92	7.66	8.53
30	---	8.84	7.65	7.19	---	6.76	6.01	6.02	6.10	6.95	7.72	8.50
31	---	---	7.65	7.16	---	6.64	---	6.07	---	6.97	7.74	---
MAX	9.54	9.11	8.68	7.67	7.36	7.60	6.70	6.23	6.48	6.97	7.74	8.53

WTR YR 1978 MEAN 7.20 HIGH 5.51 LOW 9.54

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
JUN 14...	1200	945	7.6	11.5	.8	420	85	110	38	22	2.6

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
JUN 14...	412	0	338	17	180	2.9	1.5	17	568	575	.00

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
JUN 14...	.41	.12	.53	.53	2.3	.01	.00	270	10	5.3

400619080423200. Local number, B-1.
LOCATION.--Lat 40°06'19", long 80°42'32", Hydrologic Unit 05030106, in the northeast part of Martins Ferry. Owner: City of Martins Ferry.
AQUIFER.--Gravel of Quaternary Age.
WELL CHARACTERISTICS.--Unused drilled water-table well, diameter 40 in (1.02 m), depth drilled 79 ft (24.1 m), present depth 61 ft (18.6 m), cased.
DATUM.--Altitude of land-surface datum is 1,160 ft (354 m), from topographic map. Measuring point: Surface of instrument platform, 13.40 ft (4.084 m) above land-surface datum.
REMARKS.--Water level affected by Ohio River stage and by pumping from nearby municipal wells.
PERIOD OF RECORD.--June 1948 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 38.95 ft (11.872 m) Sept. 27, 1968; minimum daily low, 0.05 ft (0.015 m) Mar. 11, 1964.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 35.55 ft (10.836 m) Mar. 3; minimum daily low, 19.51 ft (5.947 m) Dec. 16.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29.89	32.66	30.50	30.21	28.96	35.28	26.81	33.53	32.87	32.69	33.10	33.65
2	29.11	33.60	28.74	30.57	29.47	35.47	25.60	34.24	33.25	31.30	33.99	33.36
3	29.12	33.72	25.76	31.51	30.13	35.55	27.03	34.59	32.77	30.68	33.52	32.28
4	29.65	33.06	25.65	32.28	30.83	34.29	27.74	34.42	32.02	29.67	33.77	31.69
5	30.18	32.28	27.42	32.71	31.70	33.49	27.47	34.71	33.09	28.75	33.81	34.19
6	30.39	31.66	26.27	33.32	31.73	34.65	26.88	33.34	33.36	29.91	32.67	34.09
7	30.47	32.92	27.95	32.96	32.03	35.00	25.89	32.22	33.34	29.62	32.71	33.78
8	29.17	32.49	29.19	31.20	32.73	34.61	25.56	33.70	32.26	29.89	33.85	33.72
9	28.70	30.81	30.03	29.51	32.70	34.43	23.65	33.80	32.74	30.63	33.81	33.53
10	28.22	31.55	29.94	24.96	32.01	34.66	25.96	32.58	32.69	32.16	33.56	32.27
11	27.55	31.63	30.16	27.[illegible]	31.61	34.09	26.77	32.47	31.49	33.31	32.71	33.73
12	28.71	30.30	30.65	29.23	31.61	32.57	28.29	33.07	33.25	32.87	32.81	33.74
13	29.67	29.29	30.47	30.14	33.20	31.81	28.85	32.99	33.37	33.46	31.30	34.23
14	30.30	30.20	29.84	28.25	33.50	30.54	29.72	31.10	33.43	33.17	33.97	34.[illegible]
15	30.48	30.45	25.96	28.62	33.79	23.05	29.58	30.97	34.14	31.50	34.39	34.10
16	29.62	30.29	19.51	29.84	33.83	21.82	29.01	29.23	33.82	31.40	34.27	33.72
17	32.12	30.34	21.81	30.95	33.69	22.71	30.84	27.79	32.97	32.61	33.88	32.72
18	32.09	29.16	23.25	31.38	32.77	22.71	31.33	23.54	31.65	33.66	34.17	33.74
19	31.95	27.52	24.55	31.54	32.25	24.72	31.38	22.14	33.29	33.57	33.86	33.22
20	31.42	28.48	24.73	31.66	33.19	27.18	31.73	22.39	33.24	34.14	32.44	33.39
21	32.15	29.49	24.48	31.40	33.83	27.38	31.25	22.88	33.71	34.07	33.71	33.17
22	31.92	29.62	25.69	31.02	33.63	25.84	30.57	26.30	33.80	33.64	34.14	33.94
23	32.08	29.81	26.21	32.89	34.41	24.35	30.46	27.18	33.70	32.57	34.02	32.90
24	32.74	29.67	26.17	33.00	34.55	23.32	31.56	27.31	32.81	33.21	34.00	32.21
25	32.84	28.63	26.02	33.43	33.77	21.82	31.61	26.69	32.51	34.43	33.93	34.22
26	33.13	27.82	26.09	32.38	32.93	21.81	32.09	27.28	33.56	33.47	33.88	33.87
27	32.52	28.18	27.45	24.78	34.27	24.98	32.85	27.41	33.07	33.98	33.03	33.63
28	32.79	30.50	28.63	24.01	35.09	25.47	33.00	28.04	31.32	34.67	33.59	33.75
29	32.53	30.96	29.23	25.49	---	25.67	31.92	29.15	32.26	32.98	33.93	33.90
30	31.82	31.00	29.56	28.30	---	26.73	33.12	31.76	32.82	31.83	33.85	32.97
31	32.83	---	29.60	29.07	---	27.02	---	32.50	---	33.29	33.93	---
MAX	33.13	33.72	30.65	33.43	35.09	35.55	33.12	34.71	34.14	34.67	34.39	34.23

WTR YR 1978 MEAN 30.96 HIGH 19.51 LOW 35.55

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)
JUL 05...	450	6.1	11.5	.0	160	100	46	9.9	18	2.5	62

DATE	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
JUL 05...	0	51	79	110	21	.3	7.8	282	246	.37

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
JUL 05...	.00	.18	.18	.55	2.4	.02	.00	20	10	1.5

391805084261800. Local number, BU-9.
LOCATION.--Lat 39°18'05", long 84°26'18", Hydrologic Unit 05090203, 2.5 mi (4.0 km) northwest of Sharonville.
Owner: Olinkraft, Inc.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (0.20 m), depth 85 ft (26 m), cased.
DATUM.--Altitude of land-surface datum is 586.89 ft (178.884 m). Measuring point: Floor of instrument shelter, 4.66 ft (1.420 m) above land-surface datum.
REMARKS.--Prior to water year 1978, well diameter reported as 26 in (0.66 m).
PERIOD OF RECORD.--July 1938 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 24.40 ft (7.437 m) Mar. 16, 1954; minimum daily low, 4.40 ft (1.341 m) Aug. 3, 1958.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 16.28 ft (4.962 m) Oct. 1; minimum daily low, 7.33 ft 2.234 m) Mar. 17.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.28	12.61	10.75	10.50	9.96	12.08	9.39	11.04	11.19	12.77	13.34	12.12
2	13.76	12.68	10.51	10.74	10.05	12.08	9.61	11.17	11.44	12.45	13.35	11.91
3	12.92	12.87	10.45	11.03	10.20	11.72	9.64	11.18	11.57	12.30	13.40	11.74
4	12.62	13.09	10.38	11.16	10.24	11.97	9.71	11.15	11.51	12.37	13.55	11.87
5	12.47	13.04	10.21	11.24	10.17	12.03	9.93	11.07	11.67	12.56	13.55	12.11
6	12.56	12.85	9.49	11.33	10.31	12.00	9.92	11.39	11.85	12.65	13.43	12.36
7	12.57	12.62	9.56	11.39	10.43	12.06	10.24	11.40	11.68	12.77	13.44	12.57
8	12.36	12.89	9.50	11.03	10.51	11.99	10.35	11.20	11.79	12.82	13.61	12.77
9	12.18	12.89	9.56	10.19	10.58	11.87	10.35	10.74	12.07	12.73	13.64	12.74
10	12.26	13.07	9.74	10.18	10.66	11.67	10.21	10.98	12.22	12.82	13.62	12.70
11	12.38	13.33	9.74	10.21	10.76	11.52	10.34	11.02	12.09	12.96	13.48	12.85
12	12.55	13.46	9.64	10.13	10.83	11.08	10.53	10.98	12.19	13.05	13.42	13.04
13	12.66	13.45	9.66	9.94	10.79	10.61	10.85	10.65	12.49	12.94	13.37	13.07
14	12.74	13.13	9.53	9.97	11.06	9.46	11.13	9.83	12.57	12.91	13.47	13.12
15	12.73	13.05	8.76	10.28	11.24	8.39	11.18	9.50	12.62	12.83	13.57	13.26
16	12.74	13.02	8.38	10.37	11.28	7.72	11.20	9.25	12.70	12.72	13.61	13.15
17	12.77	12.96	8.19	10.36	11.42	7.33	11.15	9.16	12.78	12.96	13.78	13.08
18	12.80	13.24	8.19	10.65	11.42	7.38	11.13	9.31	12.63	13.11	13.83	13.36
19	13.15	13.33	8.34	10.70	11.38	7.46	10.78	9.40	12.54	13.16	13.89	13.55
20	13.34	13.21	8.57	10.73	11.45	7.63	10.90	9.39	12.53	13.29	13.91	13.52
21	13.40	12.82	8.84	11.09	11.63	7.86	11.10	9.43	12.56	13.42	13.97	13.64
22	13.45	12.22	9.18	11.23	11.79	8.17	11.30	9.49	12.75	13.48	14.00	13.91
23	13.44	11.86	9.27	11.26	11.77	8.49	11.30	9.49	12.85	13.34	14.07	13.87
24	13.45	11.69	9.31	11.15	11.75	8.76	11.12	9.51	12.82	13.37	14.06	13.54
25	13.42	11.59	9.51	10.85	11.93	8.78	11.03	10.25	12.66	13.07	14.10	13.61
26	12.96	11.70	9.71	9.86	12.10	8.67	10.87	10.38	12.46	13.00	13.97	13.71
27	12.63	11.72	9.99	9.89	12.11	8.68	11.00	10.35	12.63	13.17	13.82	13.61
28	12.66	12.05	10.08	9.89	12.00	8.83	11.06	10.32	12.75	13.42	13.64	13.77
29	12.66	12.08	10.21	9.93	---	9.15	11.06	10.35	12.74	13.34	13.66	13.80
30	12.60	11.88	10.39	9.95	---	9.32	10.99	10.70	12.79	13.24	13.53	13.68
31	12.52	---	10.51	9.93	---	9.32	---	11.05	---	13.17	12.74	---
MAX	16.28	13.46	10.75	11.39	12.11	12.08	11.30	11.40	12.85	13.48	14.10	13.91

WTR YR 1978 MEAN 11.63 HIGH 7.33 LOW 16.28

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
MAY 25...	1300	1400	7.2	10.5	.2	580	270	170	38	75	2.4

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
MAY 25...	384	0	315	39	190	150	.1	8.3	886	825	.74

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
MAY 25...	.04	.36	.40	1.1	5.0	.01	.00	1800	280	2.2

392021084340300. Local number, BU-56.
LOCATION.--Lat 39°20'21", long 84°34'03", Hydrologic Unit 05080002, 1.3 mi (2.1 km) east of the Great Miami River in Fairfield.
Owner: Hamilton Water Department.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 5 in (0.13 m), depth 58 ft (17.7 m), cased.
DATUM.--Altitude of land-surface datum is 583.62 ft (177.887 m). (Levels by Miami Conservancy District.)
Measuring point: Floor of instrument shelter, 3.00 ft (0.914 m) above land-surface datum.
PERIOD OF RECORD.--November 1969 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 39.11 ft (11.921 m) Feb. 25-26, 1977; minimum daily low, 26.81 ft (8.172 m) Apr. 10, 1975.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 37.10 ft (11.308 m) Oct. 1; minimum daily low, 30.28 ft (9.229 m) Apr. 21.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37.10	36.00	35.76	32.36	32.25	32.68	30.58	31.19	31.55	32.32	33.59	---
2	37.00	36.07	35.56	32.11	32.29	32.70	30.61	31.27	31.63	32.38	33.66	---
3	36.84	36.07	35.50	32.25	32.39	32.38	30.59	31.33	31.55	32.43	33.72	---
4	36.70	36.21	35.57	32.39	32.43	32.54	30.58	31.33	31.65	32.62	33.37	---
5	36.59	36.10	35.40	32.08	32.46	32.44	30.44	31.42	31.73	32.68	33.47	---
6	36.50	36.05	35.46	31.89	32.48	32.58	30.46	31.46	31.77	32.79	33.65	---
7	36.43	35.82	35.49	32.09	32.26	32.42	30.51	31.47	31.74	32.89	33.67	---
8	36.32	35.91	35.14	32.12	32.14	32.13	30.53	31.49	31.76	32.92	33.77	33.52
9	36.24	36.01	35.20	32.30	32.09	32.00	30.55	31.58	31.79	33.08	33.74	33.53
10	36.17	35.70	35.22	32.28	31.96	32.26	30.52	31.66	31.80	33.23	33.87	33.54
11	36.08	35.99	35.11	32.31	32.11	32.39	30.60	31.72	31.81	33.25	33.57	33.62
12	36.01	35.91	34.98	32.[illegible]4	32.24	32.46	30.61	31.72	31.84	33.13	33.22	33.38
13	35.97	35.94	35.04	32.6[illegible]	32.25	32.17	30.68	31.70	31.85	33.11	33.27	33.12
14	35.90	35.90	34.86	32.21	32.27	32.05	30.72	31.70	31.91	33.15	33.40	33.30
15	35.85	35.96	34.87	32.28	32.33	32.07	30.61	31.71	31.94	33.25	33.25	33.52
16	35.81	36.01	34.65	32.31	32.16	31.81	30.68	31.72	31.94	33.26	33.45	33.77
17	36.04	35.77	34.63	32.34	32.17	31.60	30.72	31.77	32.05	33.20	33.48	33.92
18	36.38	35.88	34.24	32.47	32.10	31.42	30.72	31.82	32.08	33.26	33.40	34.02
19	36.58	36.05	34.21	32.21	32.27	31.16	30.77	31.84	32.10	33.37	---	34.09
20	36.61	35.94	34.06	32.28	32.28	31.00	30.59	31.74	32.10	33.07	---	34.16
21	36.61	35.95	34.05	32.21	32.22	30.75	30.28	31.72	32.08	33.16	---	34.23
22	36.63	35.99	33.74	32.35	32.22	30.58	30.60	31.69	32.18	33.05	---	34.28
23	36.55	36.07	33.26	32.42	32.27	30.51	30.76	31.63	32.21	33.05	---	34.37
24	36.50	35.92	33.00	32.47	32.29	30.47	30.84	31.57	32.32	32.95	---	34.39
25	36.62	35.55	33.12	32.49	32.35	30.62	30.94	31.57	32.43	32.73	---	34.43
26	36.52	35.35	32.87	32.59	32.45	30.69	31.01	31.55	32.47	33.04	---	34.51
27	36.41	35.69	32.88	32.64	32.52	30.72	31.06	31.52	32.05	33.16	---	34.54
28	36.06	35.88	32.89	32.48	32.59	30.73	31.08	31.49	31.85	33.35	---	34.44
29	36.11	35.97	32.82	32.51	---	30.73	31.08	31.45	32.08	33.50	---	34.07
30	36.12	36.00	32.53	32.52	---	30.73	31.13	31.46	32.23	33.51	---	34.17
31	35.79	---	32.46	32.52	---	30.55	---	31.49	---	33.61	---	---
MAX	37.10	36.21	35.76	32.64	32.59	32.70	31.13	31.84	32.47	33.61	33.87	34.54

WTR YR 1978 MEAN 33.11 HIGH 30.28 LOW 37.10

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
MAY											
24...	1345	890	7.3	13.5	.0	370	50	100	30	26	3.3

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
MAY											
24...	394	0	323	32	72	44	.1	8.7	522	478	2.5

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
MAY										
24...	.01	.10	.11	2.6	12	.02	.01	90	10	4.2

392445084333000. Local number BU-36.
LOCATION.--Lat 39°24'45", long 84°33'30", Hydrologic Unit 05080002, on right bank of Great Miami River 300 ft (90 m) downstream from Twomile Creek in Hamilton.
Owner: Champion Paper Company.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled industrial supply water-table well, diameter 30 in (0.76 m), depth 168 ft (51.2 m) cased.
PERIOD OF RECORD.--December 1965 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)
NOV										
15...	1630	840	7.3	16.0	440	120	35	390	0	320
FEB										
23...	0920	890	7.3	12.0	440	120	35	384	0	320
MAY										
24...	0930	860	7.3	17.0	410	110	34	384	0	320
AUG										
02...	1030	990	7.2	17.0	410	110	34	396	0	320

DATE	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
NOV										
15...	31	110	45	1.1	642	1.0	.00	1	1	10
FEB										
23...	31	120	46	.1	573	1.2	.00	--	--	--
MAY										
24...	31	110	46	.1	616	1.5	.00	--	--	--
AUG										
02...	40	100	45	.1	615	1.6	.00	0	0	18

DATE	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
NOV									
15...	3	9	3	20	5	5	0	90	80
FEB									
23...	--	--	--	80	--	--	0	--	--
MAY									
24...	--	--	--	100	--	--	10	--	--
AUG									
02...	<10	5	4	60	1	0	10	20	10

392515084322000. Local number, BU-5.
LOCATION.--Lat 39°25'15", long 84°32'22", Hydrologic Unit 05080002, 2.0 mi (3.2 km) north of courthouse in Hamilton.
Owner: Hamilton Water Department
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 18 in (0.46 m), depth 110 ft (33.5 m) cased.
DATUM.--Altitude of land-surface datum is 590 ft (180 m), from topographic map. Measuring point: Floor of instrument shelter 5.71 ft (1.740 m) above land surface datum.
REMARKS.--Water level affected by pumping of nearby North Hamilton well field and by stage of the Great Miami River.
PERIOD OF RECORD.--July 1939 to Current year
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 42.05 ft (12,817 m) Sept. 16-17, 1954; minimum daily low, 4.10 ft (1,250 m) Jan. 23, 1959.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 27.02 ft (8.236 m) Nov. 17; minimum daily low, 13.86 ft (4.225 m) Mar. 27.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.12	21.13	24.37	17.40	18.05	18.96	14.21	15.58	15.96	17.67	18.25	24.97
2	20.80	20.91	20.39	22.07	22.56	23.87	14.30	15.31	19.80	17.58	18.24	20.85
3	24.93	20.91	19.98	17.68	18.35	19.13	14.38	15.29	16.24	17.40	18.28	18.68
4	20.85	24.36	19.81	21.85	18.22	19.08	18.63	19.35	16.21	17.38	18.06	23.46
5	26.83	20.90	24.58	22.02	18.15	19.05	17.76	15.52	16.30	17.35	18.05	18.77
6	24.88	20.81	19.75	22.22	22.67	23.52	18.58	15.58	21.11	22.50	18.12	23.94
7	24.88	25.05	25.03	18.32	22.20	23.83	15.13	15.46	16.62	17.57	18.28	23.86
8	20.99	20.99	19.73	17.98	23.24	23.73	14.87	15.47	16.64	17.48	18.34	18.86
9	20.76	25.10	19.52	21.80	23.76	23.92	14.83	15.56	16.60	17.53	18.26	18.73
10	25.65	26.98	19.47	17.91	23.87	23.91	14.85	15.68	16.66	17.57	18.24	18.87
11	26.35	21.27	19.39	21.78	19.01	19.60	15.01	19.65	16.60	17.64	18.24	18.97
12	24.89	20.93	19.30	22.88	18.83	19.14	18.60	15.65	16.71	17.71	18.26	24.09
13	26.45	20.83	19.32	22.18	23.08	18.78	15.31	15.52	16.78	17.76	18.26	25.37
14	21.27	26.08	19.07	18.20	18.89	18.14	20.05	15.44	16.69	17.80	18.37	25.46
15	21.11	21.06	21.52	18.02	23.38	16.24	15.44	20.50	19.65	17.75	18.46	19.67
16	21.01	20.83	17.36	18.24	23.60	19.84	15.42	15.42	16.90	17.82	18.51	19.45
17	21.01	27.02	16.99	18.28	23.69	14.82	15.49	15.21	16.92	17.94	23.86	19.38
18	20.84	25.34	16.68	18.43	19.31	14.54	15.41	15.21	16.89	18.00	23.77	19.32
19	25.68	21.28	16.29	22.08	19.07	14.47	20.71	19.90	16.96	18.05	18.92	19.40
20	21.03	20.91	16.12	18.69	23.93	19.15	21.00	15.47	16.92	23.19	18.82	19.29
21	20.87	25.70	16.04	18.73	24.12	19.14	20.82	15.46	16.82	18.38	18.83	23.67
22	20.82	20.97	20.96	18.75	19.39	18.99	15.63	19.69	21.90	18.29	18.91	20.04
23	20.78	25.51	21.07	18.76	23.70	19.05	15.38	15.66	17.07	18.31	25.69	20.11
24	20.72	25.69	16.62	18.76	19.36	19.02	15.38	19.85	17.00	18.29	26.09	20.18
25	20.74	25.76	16.56	18.39	19.21	14.20	15.31	15.62	16.93	18.29	24.97	19.97
26	20.64	21.12	21.26	18.20	19.13	14.05	15.14	15.43	16.89	18.25	20.07	19.85
27	24.92	20.85	16.76	18.08	19.12	13.86	19.98	15.39	16.99	18.28	19.49	19.98
28	24.93	20.72	17.05	18.72	19.00	18.95	20.24	15.49	16.97	18.28	19.31	24.23
29	21.16	20.71	21.47	17.88	---	13.96	15.49	15.59	21.78	18.34	19.34	19.99
30	20.85	20.55	17.40	17.83	---	18.68	15.42	15.72	21.39	18.28	18.99	20.05
31	24.99	---	17.38	22.52	---	14.13	---	15.86	---	18.24	22.34	---
MAX	26.83	27.02	25.03	22.88	24.12	23.92	21.00	20.50	21.90	23.19	26.09	25.46

WTR YR 1978 MEAN 19.42 HIGH 13.86 LOW 27.02

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
MAY											
24...	1025	750	7.8	12.5	.0	320	38	73	34	18	2.8

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
MAY											
24...	346	0	284	8.8	54	41	.1	5.0	455	401	.01

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
MAY										
24...	.07	.08	.15	.16	.71	.02	.00	2600	120	1.3

393202084241500. Local number, BU-15.
LOCATION.--Lat 39°32'02", long 84°24'15", Hydrologic Unit 05080002, at Hook Field (municipal airport) at Middletown.
Owner: City of Middletown.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in (0.15 m), depth 23 ft (7.0 m), cased.
DATUM.--Altitude of land-surface datum is 641 ft (195 m), from topographic map. Measuring point: Floor of instrument shelter 3.50 ft (1.067 m) above land-surface datum.
REMARKS.--Water level affected by pumping wells nearby in Middletown well field.
PERIOD OF RECORD.--June 1972 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 14.05 ft (4.282 m) Feb. 8-9, 1977; minimum daily low, 0.06 ft (0.018 m) Feb. 25, 1975.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 13.44 ft (4.097 m) Nov. 5; minimum daily low, 3.41 ft (1.039 m) Mar. 17.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.89	12.70	12.21	9.69	9.84	12.73	6.94	9.37	10.78	11.99	12.05	10.97
2	12.49	13.04	11.43	9.92	9.95	12.81	7.10	9.59	10.65	11.99	12.29	11.04
3	11.96	13.25	10.74	10.14	10.05	12.82	7.57	9.79	10.93	11.23	12.34	10.88
4	11.88	13.37	10.34	10.34	10.14	12.63	7.93	9.95	10.50	11.23	11.44	10.62
5	12.14	13.44	10.32	10.49	10.17	12.65	8.23	10.10	10.95	10.66	11.63	10.95
6	12.35	13.15	9.98	10.54	10.25	12.73	8.45	10.25	10.90	10.86	11.42	10.93
7	12.54	13.01	9.94	10.59	10.39	12.83	8.50	10.39	10.90	10.87	11.72	11.58
8	12.56	12.96	10.07	10.52	10.78	12.90	8.30	10.50	11.03	11.41	11.57	11.58
9	12.15	13.07	10.20	9.92	11.02	12.91	8.31	10.53	10.81	11.41	11.58	12.14
10	12.05	13.32	10.35	9.79	11.16	12.91	8.48	10.08	11.17	11.48	11.88	11.95
11	12.21	13.33	10.52	9.97	11.23	12.81	8.68	10.39	11.00	11.42	11.76	12.03
12	12.29	12.92	10.63	10.03	10.91	12.67	8.84	10.43	11.25	11.82	12.08	11.88
13	12.32	12.87	10.67	10.10	10.84	12.36	9.05	10.48	11.05	11.96	11.89	11.66
14	12.29	12.85	10.58	10.18	11.56	11.84	9.28	10.03	11.05	11.96	12.03	12.23
15	12.36	12.83	8.15	10.31	11.77	8.17	9.50	9.63	11.31	12.14	11.92	12.07
16	12.47	12.83	5.70	10.43	12.11	5.18	9.68	9.57	11.24	12.14	11.94	12.51
17	12.47	12.80	5.62	10.53	12.25	3.41	9.82	9.28	11.62	12.10	12.09	12.29
18	12.43	12.60	5.54	10.61	12.33	3.73	9.88	9.35	11.68	12.13	11.96	12.31
19	12.46	12.49	5.25	10.48	12.46	4.25	9.86	9.51	11.38	12.10	12.30	12.32
20	12.88	12.51	5.58	10.29	12.65	4.55	9.55	9.85	11.25	12.47	12.30	12.23
21	12.91	12.52	5.97	10.21	12.42	4.65	9.03	9.43	11.11	12.74	12.21	12.27
22	12.65	12.29	6.52	10.19	12.52	4.51	8.56	9.93	11.08	12.75	12.69	12.54
23	12.66	12.18	7.11	10.71	12.54	4.47	8.44	9.85	11.01	12.73	12.96	12.84
24	12.76	12.21	7.59	10.76	12.24	4.70	8.96	9.80	11.49	12.51	12.99	12.77
25	12.89	12.26	7.84	10.71	12.23	4.95	9.03	9.23	11.53	12.48	12.75	12.83
26	12.89	12.27	8.04	10.64	12.23	4.95	8.88	9.29	11.51	12.17	12.99	12.65
27	12.83	12.24	8.37	10.20	12.41	4.76	8.44	9.51	11.31	12.29	12.75	12.63
28	12.88	12.35	8.68	9.88	12.61	5.74	8.60	9.40	11.32	12.10	12.63	12.80
29	12.90	12.40	8.87	9.70	---	5.93	8.86	9.76	11.69	12.40	12.40	12.72
30	12.83	12.41	9.21	9.64	---	6.04	9.11	8.84	11.67	12.25	12.12	13.05
31	12.74	---	9.40	9.72	---	6.48	---	10.26	---	12.13	11.65	---
MAX	12.91	13.44	12.21	10.76	12.65	12.91	9.88	10.53	11.69	12.75	12.99	13.05

WTR YR 1978 MEAN 10.83 HIGH 3.41 LOW 13.44

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
JUN 01...	1015	670	7.4	8.5	.0	280	37	69	27	15	2.3

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
JUN 01...	380	0	246	19	57	28	.3	6.3	365	353

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
JUN 01...	2.9	.01	.20	.21	3.1	14	.00	.00	58	10

395835083491700. Local number CL-20.
LOCATION.--Lat 39°58'35", long 83°49'17", Hydrologic Unit 05080001, on left bank of Mad River 100 ft (30 m) upstream from Eagle City Road near Springfield.
Owner: City of Springfield.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled public supply water-table well, diameter 26 in (0.66 m), depth 96 ft (29.3 m), screened below 51 ft (15.5 m).
PERIOD OF RECORD.--June 1967 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)
OCT											
04...	770	7.4	6	94	30	15	354	0	290	23	81
APR											
04...	708	7.3	9	71	27	8.9	330	0	270	26	77

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT											
04...	29	462	.59	.01	.60	.05	.00	<10	710	2	110
APR											
04...	18	565	2.2	.02	2.2	.04	.00	<10	300	6	100

CLERMONT COUNTY

385144084133900. Local number, CT-2.
LOCATION.--Lat 38°51'44", long 84°13'39", Hydrologic Unit 05090201, at the Wm. H. Zimmer Nuclear Power Station, Moscow, Ohio.
Owner: Cincinnati Gas and Electric Company.
AQUIFER.--Sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled test water-table well, diameter 8 in (0.2 m), depth 90 ft (27.4 m), cased to 90 ft (27.4 m).
DATUM.--Altitude of land-surface datum is 500 ft (152 m), from topographic map. Measuring point: Floor of instrument shelter 2.50 ft (0.762 m) above land-surface datum.
PERIOD OF RECORD.--January 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 43.24 ft (13.180 m) May 23, 1978; minimum daily, 23.17 ft (7.062 m) March 13, 1978.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 43.24 ft (13.180 m) May 23; minimum daily low, 23.17 ft (7.062 m) Mar. 13.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37.97	38.52	38.87	36.96	35.12	33.44	24.49	25.49	30.89	35.88	38.83	40.33
2	37.99	38.53	38.88	36.85	35.00	33.43	24.52	25.52	31.08	35.98	38.86	40.32
3	38.02	38.55	38.88	36.75	34.87	33.44	24.54	25.55	31.27	36.16	39.03	40.34
4	38.04	38.57	38.88	36.65	34.74	33.45	24.57	25.59	31.44	36.31	39.12	40.42
5	38.06	38.59	38.88	36.56	34.60	33.46	24.59	25.64	31.66	36.38	39.16	40.44
6	38.08	38.60	38.88	36.48	34.47	33.46	24.63	25.68	31.86	36.43	39.24	40.45
7	38.10	38.62	38.88	36.40	34.35	32.36	24.66	25.72	32.03	36.51	39.33	40.48
8	38.13	38.64	38.88	36.33	34.24	32.36	24.69	25.76	32.28	36.58	39.36	40.50
9	38.15	38.65	38.88	36.27	34.14	32.37	24.71	25.80	32.54	36.66	39.37	40.55
10	38.16	38.67	38.88	36.23	34.05	30.42	24.74	25.84	32.64	36.75	39.44	40.58
11	38.19	38.69	38.88	36.18	33.97	23.85	24.76	25.88	32.74	36.81	39.49	40.61
12	38.20	38.70	38.87	36.13	33.91	23.31	24.79	25.92	32.87	41.45	39.49	40.67
13	38.22	38.71	38.86	36.07	33.85	23.17	24.82	25.95	33.06	37.31	39.53	40.70
14	38.24	38.73	38.84	36.01	33.80	23.24	24.85	25.99	33.19	37.14	39.55	40.76
15	38.26	38.74	38.80	35.95	33.76	23.36	24.88	26.03	33.32	37.24	39.56	40.83
16	38.28	38.75	38.78	35.89	33.73	23.47	24.91	26.07	33.47	37.30	39.60	40.82
17	38.29	38.76	38.73	35.83	33.71	23.57	24.95	26.10	33.66	37.45	39.68	40.89
18	38.31	38.77	38.67	35.77	33.69	23.66	24.98	26.14	33.83	37.51	39.70	40.94
19	38.33	38.78	38.59	35.71	33.67	23.77	25.01	26.18	33.99	37.57	39.81	40.99
20	38.34	38.79	38.51	35.67	33.66	23.85	25.05	26.21	34.16	37.67	39.85	41.00
21	38.36	38.80	38.40	35.62	33.66	23.92	25.09	26.24	34.35	37.77	39.82	41.10
22	38.37	38.81	38.28	35.59	33.65	23.99	25.13	26.27	34.52	37.84	39.85	41.21
23	38.39	38.82	38.16	35.55	33.65	24.06	25.16	43.24	34.68	37.96	39.89	41.20
24	38.40	38.83	38.03	35.51	33.65	24.13	25.20	39.31	34.84	38.04	39.93	41.26
25	38.42	38.84	37.88	35.47	33.66	24.19	25.24	30.64	34.98	38.09	39.98	41.33
26	38.43	38.84	37.74	35.42	33.67	24.24	25.29	30.36	35.17	38.18	40.03	41.37
27	38.44	38.85	37.61	35.39	33.67	24.29	25.33	30.34	35.37	38.35	40.09	41.42
28	38.46	38.86	37.47	35.36	33.55	24.34	25.37	30.30	35.52	38.45	40.15	41.54
29	38.48	38.87	37.35	35.32	---	24.39	25.41	30.35	35.62	38.52	40.22	41.56
30	38.49	38.87	37.21	35.27	---	24.43	25.45	30.52	35.75	38.63	40.24	41.63
31	38.51	---	37.08	35.20	---	24.46	---	30.72	---	38.75	40.31	---
MAX	38.51	38.87	38.88	36.96	35.12	33.46	25.45	43.24	35.75	41.45	40.31	41.63

WTR YR 1978 MEAN 34.71 HIGH 23.17 LOW 43.24

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
JUL											
11...	1730	695	7.5	13.5	.7	340	38	86	30	10	2.2

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
JUL											
11...	366	0	300	19	26	15	.2	11	331	361	.01

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
JUL										
11...	.15	1.8	2.0	2.0	8.9	4.1	.00	110	490	4.1

COSHOCTON COUNTY

401735081523800. Local number, CS-2.
LOCATION.--Lat 40°17'35", long 81°52'38", Hydrologic Unit 05040003, 1.7 mi (2.7 km) northwest of courthouse in Coshocton.
Owner: City of Coshocton.
AQUIFER.--Sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled test well, diameter 6 in (0.15 m), depth 40 ft (12.2 m) cased.
DATUM.--Altitude of land-surface datum is 740 ft (226 m), from topographic map. Measuring point: Floor of of instrument shelter 8.50 ft (2.591 m) above land-surface datum.
PERIOD OF RECORD.--May 1949 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 18.47 ft (5.630 m) Feb. 12, 1977; minimum daily low, 0.43 ft (0.131 m) Feb. 21, 1951.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 17.32 ft (5.279 m) Nov. 4; minimum daily low, 5.36 ft (1.634 m) Mar. 27.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.63	16.74	15.51	9.94	12.78	14.62	6.29	10.46	12.72	13.97		
2	15.59	16.87	14.90	10.01	13.10	14.62	6.38	11.05	12.90	14.02		
3	14.97	17.17	13.11	11.07	13.26	14.64	6.63	11.55	13.09	14.42		
4	15.27	17.32	12.80	11.45	12.78	15.08	6.78	11.92	13.30	14.32		
5	15.61	17.23	12.69	11.88	12.23	15.07	6.94	12.16	13.67	13.81		
6	15.83	16.75	12.32	12.18	11.96	15.05	6.79	12.26	13.90	14.36		
7	16.10	16.49	11.52	12.13	11.87	15.19	6.71	12.16	14.15	14.47		
8	16.15	16.99	11.08	12.28	11.75	15.31	6.48	12.18	14.40	---		
9	15.88	17.19	11.44	12.00	11.89	15.42	6.43	12.47	14.45	---		
10	15.72	16.91	11.76	11.47	12.12	15.26	6.74	12.56	14.42	---		
11	15.76	16.98	11.92	11.47	12.57	15.41	6.83	12.69	14.32	---		
12	15.84	16.57	12.47	11.62	12.96	15.09	6.97	13.15	14.55	---		
13	15.96	16.38	12.99	11.59	13.07	14.85	7.54	13.26	14.78	---		
14	15.98	16.32	13.21	11.42	13.21	14.30	8.32	13.09	14.96	---		
15	16.13	16.67	11.73	11.43	13.39	12.41	8.68	12.04	15.14	---		
16	16.10	16.97	10.43	11.78	13.56	10.66	9.08	11.56	15.27	---		
17	16.01	17.12	8.13	11.97	13.61	8.66	9.63	11.44	15.32	---		
18	16.28	16.73	7.27	12.34	14.07	8.07	10.36	11.15	15.30	---		
19	16.36	16.64	7.13	12.69	14.07	7.12	10.65	10.95	15.28	---		
20	16.48	16.62	6.96	12.89	14.23	6.59	10.42	10.87	14.69	---		
21	16.38	16.15	6.73	13.12	14.59	6.35	9.73	10.97	14.34	---		
22	16.30	16.17	6.66	13.40	14.82	6.19	9.18	11.08	14.27	---		
23	15.87	15.99	6.01	13.70	14.87	6.05	8.79	11.45	14.33	---		
24	16.18	15.71	6.00	14.02	14.90	5.89	8.85	11.67	14.74	---		
25	16.67	14.95	6.44	14.08	15.00	5.88	9.18	11.66	14.78	---		
26	17.01	14.62	6.92	13.89	14.88	5.61	9.46	11.37	14.81	---		
27	17.11	14.62	7.48	11.88	14.70	5.36	9.74	11.31	14.78	---		
28	17.07	14.77	8.39	12.22	14.61	5.62	9.97	11.50	14.48	---		
29	17.12	15.20	8.86	11.52	---	5.76	10.14	11.56	13.82	---		
30	16.68	15.43	9.10	11.89	---	5.90	10.39	11.89	14.10	---		
31	16.54	---	9.55	12.56	---	5.98	---	12.36	---	---		
MAX	17.12	17.32	15.51	14.08	15.00	15.42	10.65	13.26	15.32	14.47		

WTR YR 1978 MEAN 12.61 HIGH 5.36 LOW 17.32
NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
JUL 07...	1350	575	8.0	12.0	.0	270	73	75	20	13	2.3

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
JUL 07...	240	0	197	3.8	67	25	.1	9.1	385	330	.42

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
JUL 07...	.03	.08	.11	.53	2.3	.01	.00	30	210	2.3

FAIRFIELD COUNTY

394544082271000. Local number, F-1.
LOCATION.--Lat 39°45'44", long 82°27'10", Hydrologic Unit 05030204, near the west edge of West Rushville.
Owner: State of Ohio.
AQUIFER.--Sandstone of Mississippian Age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in (0.15 m), depth 84 ft (25.6 m), cased.
DATUM.--Altitude of land-surface datum is 980 ft (299 m), from topographic map. Measuring point: Floor of instrument shelter 8.02 ft (2.444 m) above land-surface datum.
PERIOD OF RECORD.--March 1946 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 19.81 ft (6.038 m) Mar. 1-4, 1964; minimum daily low, 7.27 ft (2.216 m) May 5-6, 1962.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 18.63 ft (5.678 m) Sept. 30; minimum daily low, 12.83 ft (3.911 m) Apr. 5-7.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.14	17.59	17.94	15.17	14.49	14.88	12.95	13.85	13.77	16.11	17.51	18.14
2	18.12	17.59	17.94	15.15	14.45	14.92	12.88	13.88	13.82	15.99	17.54	18.22
3	18.10	17.59	17.94	15.15	14.40	14.96	12.85	13.90	13.86	16.10	17.59	18.10
4	18.09	17.61	17.94	15.15	14.38	15.00	12.85	13.91	13.91	16.17	17.64	18.20
5	18.09	17.62	17.94	15.14	14.39	15.05	12.83	13.92	13.96	16.25	17.76	18.14
6	18.08	17.63	17.91	15.14	14.41	15.09	12.83	13.93	14.01	16.25	17.80	18.21
7	18.07	17.63	17.87	15.14	14.41	15.14	12.83	13.94	14.06	16.31	17.67	18.20
8	18.05	17.64	17.82	15.14	14.41	15.18	12.84	13.95	14.10	16.39	17.60	18.26
9	18.02	17.66	17.61	15.15	14.41	15.23	12.86	13.96	14.15	16.42	17.66	18.32
10	17.96	17.67	17.52	15.15	14.41	15.27	12.88	13.96	14.21	16.56	17.55	18.25
11	17.94	17.68	17.52	15.15	14.41	15.32	12.90	13.96	14.26	16.63	17.65	18.34
12	17.92	17.69	17.52	15.15	14.41	15.36	12.92	13.96	14.32	16.69	17.70	18.25
13	17.88	17.71	17.52	15.15	14.41	15.39	12.95	13.95	14.37	16.63	17.63	18.31
14	17.85	17.73	17.52	15.12	14.41	15.39	12.99	13.92	14.42	16.71	17.72	18.32
15	17.81	17.75	17.35	15.06	14.41	15.39	13.03	13.85	14.47	16.74	17.83	18.39
16	17.77	17.75	16.85	14.97	14.41	15.39	13.07	13.77	14.53	16.85	17.84	18.38
17	17.74	17.76	16.51	14.92	14.41	15.37	13.11	13.65	14.60	16.94	17.82	18.31
18	17.70	17.77	16.24	14.86	14.44	15.17	13.15	13.56	14.64	16.92	17.85	18.41
19	17.66	17.79	16.01	14.80	14.46	14.96	13.18	13.48	14.69	16.98	17.88	18.44
20	17.63	17.81	15.87	14.76	14.49	14.71	13.23	13.43	14.74	17.13	17.86	18.50
21	17.61	17.82	15.72	14.72	14.54	14.58	13.27	13.42	14.79	17.17	17.96	18.44
22	17.60	17.84	15.59	14.71	14.59	14.37	13.32	13.43	14.83	17.27	17.90	18.57
23	17.59	17.85	15.47	14.71	14.62	14.25	13.39	13.44	14.87	17.19	17.98	18.63
24	17.58	17.86	15.43	14.71	14.66	14.13	13.51	13.45	14.92	17.32	17.94	18.55
25	17.58	17.87	15.36	14.71	14.70	14.05	13.57	13.48	14.96	17.16	18.03	18.62
26	17.57	17.88	15.28	14.69	14.74	13.95	13.62	13.48	15.02	17.25	18.10	18.56
27	17.56	17.89	15.25	14.65	14.79	13.84	13.64	13.50	15.06	17.26	18.05	18.63
28	17.56	17.90	15.23	14.65	14.83	13.68	13.67	13.53	16.34	17.37	18.10	18.54
29	17.56	17.91	15.22	14.63	---	13.39	13.72	13.58	16.02	17.43	18.15	18.62
30	17.56	17.94	15.18	14.58	---	13.21	13.77	13.63	16.03	17.37	18.16	18.63
31	17.57	---	15.17	14.55	---	13.08	---	13.67	---	17.49	18.06	---
MAX	18.14	17.94	17.94	15.17	14.83	15.39	13.77	13.96	16.34	17.49	18.16	18.63

WTR YR 1978 MEAN 15.91 HIGH 12.83 LOW 18.63

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
JUN 28...	1620	620	7.3	12.0	.0	300	0	74	27	18	2.1

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
JUN 28...	410	0	336	33	16	1.8	.2	11	324	353	.00

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
JUN 28...	.66	.00	.66	.66	2.9	.12	.00	110	480	1.0

FRANKLIN COUNTY

395118082573300. Local number, FR-3.
LOCATION.--Lat 39°51'18", long 82°57'32", Hydrologic Unit 05060001, 0.7 mi (1.1 km) southwest of Beema.
Owner: R. Hann
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled test water-table well, diameter 12 in (0.3 m), depth drilled 60 ft (18.3 m), present depth 53 ft (16.2 m), cased.
DATUM.--Altitude of land-surface datum is 712.94 ft (217.304 m). Measuring point: Floor of instrument shelter 3.43 ft (1.045 m) above land-surface datum.
PERIOD OF RECORD.--April 1946 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 20.75 ft (6.325 m) July 7, 1966; minimum daily low, 0.0 ft (0.0 m) Jan. 22, 1959.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 12.84 ft (3.914 m) Oct. 1; minimum daily low, 6.79 ft (2.070 m) Mar. 27.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.84	12.66	11.69	11.40	9.95	12.29	9.04	10.97	11.23	11.93	12.46	11.12
2	11.59	12.65	11.27	11.52	10.07	12.29	9.09	11.13	11.38	11.93	12.48	11.41
3	11.81	12.64	11.39	11.65	10.07	12.29	9.14	11.25	11.48	11.79	12.51	11.64
4	12.03	12.65	11.40	11.73	10.00	12.33	9.41	11.27	11.54	11.83	12.47	11.82
5	12.21	12.62	11.37	11.73	10.54	12.35	9.56	11.20	11.64	11.91	12.51	11.95
6	12.26	12.58	10.41	11.78	10.84	12.35	9.63	11.30	11.69	11.93	12.50	12.05
7	12.23	12.57	10.60	11.80	11.09	12.34	9.47	11.34	11.71	11.97	12.09	12.13
8	12.24	12.53	10.67	11.52	11.25	12.32	9.46	11.36	11.35	12.02	12.11	12.16
9	12.02	12.54	10.69	9.89	11.33	12.33	9.71	11.00	10.92	12.05	12.22	12.25
10	11.91	12.58	10.88	9.59	11.51	12.27	9.95	11.04	10.93	12.10	12.24	12.31
11	12.09	12.60	10.98	9.70	11.60	12.22	10.29	11.16	11.13	12.13	12.19	12.35
12	12.23	12.67	11.07	9.83	11.66	12.04	10.48	11.22	11.29	12.16	12.24	12.40
13	12.32	12.70	11.28	10.07	11.67	11.41	10.72	11.15	11.39	12.20	12.05	12.43
14	12.37	12.70	11.15	10.51	11.76	10.27	10.87	10.40	11.50	12.25	12.11	12.44
15	12.43	12.72	9.25	10.85	11.82	6.95	11.02	10.09	11.60	12.25	12.13	12.43
16	12.48	12.72	9.33	11.06	11.85	6.94	11.12	10.08	11.67	12.25	12.20	12.44
17	12.51	12.55	9.35	11.20	11.90	7.51	11.20	9.95	11.75	12.30	12.26	12.41
18	12.55	12.34	9.45	11.35	11.93	8.73	11.20	9.83	11.83	12.34	12.33	12.45
19	12.61	12.42	9.51	11.39	11.97	9.11	10.89	9.94	11.71	12.37	12.38	12.47
20	12.64	12.45	9.79	11.47	12.00	9.11	10.51	10.11	11.29	12.40	12.38	12.51
21	12.65	12.44	9.98	11.52	12.04	9.03	10.27	10.26	11.28	12.44	12.38	12.56
22	12.69	11.98	10.30	11.37	12.09	8.45	9.72	10.42	11.23	12.45	12.43	12.61
23	12.70	12.05	10.61	11.40	12.14	8.75	9.88	10.56	11.12	12.47	12.45	12.61
24	12.72	12.16	10.73	11.39	12.16	8.98	10.00	10.62	11.35	12.40	12.49	12.61
25	12.71	12.23	10.80	11.39	12.20	9.12	10.04	10.47	11.56	12.24	12.52	12.63
26	12.68	12.33	10.78	10.86	12.25	8.70	9.93	10.28	11.58	12.19	12.55	12.63
27	12.71	12.39	11.04	9.33	12.26	6.79	10.25	10.40	11.70	12.29	12.56	12.65
28	12.73	12.49	11.05	9.33	12.23	7.79	10.50	10.62	11.72	12.36	12.46	12.67
29	12.69	12.50	10.98	9.33	---	8.74	10.69	10.90	11.76	12.39	12.02	12.68
30	12.67	12.50	11.05	9.51	---	9.26	10.84	10.97	11.85	12.42	11.96	12.68
31	12.65	---	11.26	9.76	---	9.12	---	11.08	---	12.43	11.57	---
MAX	12.84	12.72	11.69	11.80	12.26	12.35	11.20	11.36	11.85	12.47	12.56	12.68

WTR YR 1978 MEAN 11.42 HIGH 6.79 LOW 12.84

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)
APR 14...	1015	648	7.4	12.5	.0	340	65	90	29	2.0	2.1	340

DATE	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
APR 14...	0	279	22	63	8.3	.1	12	391	170	10	2.6

395157083003500. Local number, FR-109.
LOCATION.--Lat 39°51'57", long 83°00'35", Hydrologic Unit 05060001, 6.6 mi (10.5 km) south of the State capital in Columbus.
Owner: City of Columbus.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in (0.15 m), depth 92 ft (28.0 m), cased to 82 ft (25.0 m).
DATUM.--Altitude of land-surface datum is 702.24 ft (214.043 m). Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.
PERIOD OF RECORD.--July 1975 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 21.34 ft (6.504 m) Feb. 9-12, 1977; minimum daily low, 12.43 ft (3.789 m) Mar. 27, 1978.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 20.60 ft (6.279 m) Nov. 28-30; minimum daily low, 12.43 ft (3.789 m) Mar. 27.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.38	20.46	20.47	15.71	16.23	17.22	12.80	14.44	15.52	17.10	18.12	18.72
2	20.35	20.47	20.44	15.76	16.27	17.23	12.91	14.50	15.57	17.09	18.15	18.74
3	20.35	20.48	20.41	15.83	16.31	17.27	12.95	14.53	15.61	17.15	18.19	18.76
4	20.36	20.49	20.37	15.85	16.32	17.33	13.07	14.53	15.63	17.21	18.23	18.78
5	20.36	20.50	20.31	15.87	16.34	17.36	13.18	14.66	15.70	17.24	18.25	18.80
6	20.36	20.50	20.16	15.92	16.35	17.42	13.19	14.73	15.73	17.27	18.26	18.82
7	20.36	20.50	20.11	15.95	16.42	17.44	13.27	14.75	15.74	17.31	18.25	18.83
8	20.33	20.52	20.03	15.85	16.44	17.46	13.33	14.75	15.66	17.35	18.29	18.85
9	20.33	20.52	19.94	15.66	16.46	17.48	13.33	14.80	15.70	17.38	18.31	18.86
10	20.33	20.54	19.92	15.71	16.49	17.51	13.36	14.86	15.73	17.43	18.32	18.87
11	20.33	20.55	19.87	15.73	16.52	17.52	13.48	14.89	15.76	17.46	18.35	18.89
12	20.34	20.57	19.80	15.73	16.56	17.50	13.53	14.91	15.80	17.48	18.36	18.92
13	20.34	20.57	19.76	15.74	16.57	17.43	13.69	14.88	16.85	17.50	18.40	18.94
14	20.33	20.57	19.68	15.81	16.64	17.20	13.76	14.92	16.43	17.55	18.43	18.95
15	20.34	20.57	19.00	15.90	16.67	16.61	13.83	14.97	16.47	17.58	18.45	18.97
16	20.35	20.58	18.05	15.94	16.70	15.69	13.89	14.99	16.51	17.63	18.47	18.99
17	20.35	20.57	17.30	15.96	16.75	15.02	13.95	15.00	16.54	17.67	18.51	19.01
18	20.36	20.58	16.64	16.05	16.77	14.53	13.95	15.05	16.57	17.70	18.53	19.03
19	20.38	20.59	16.21	16.06	16.82	14.14	13.97	15.08	16.61	17.72	18.56	19.05
20	20.39	20.59	15.85	16.12	16.85	13.82	14.06	15.10	16.64	17.76	18.58	19.07
21	20.40	20.59	15.76	16.20	16.90	13.51	14.13	15.17	16.69	17.80	18.60	19.10
22	20.41	20.57	15.78	16.24	16.94	13.20	14.18	15.18	16.74	17.82	18.63	19.12
23	20.41	20.57	15.74	16.27	16.96	12.99	14.19	15.19	16.77	17.86	18.65	19.12
24	20.42	20.58	15.71	16.28	16.99	12.84	14.19	15.25	16.81	17.87	18.66	19.14
25	20.42	20.57	15.64	16.28	17.0[illegible]	12.77	14.20	15.29	16.84	17.88	18.69	19.16
26	20.42	20.58	15.64	16.13	17.11	12.62	14.22	15.32	16.89	17.91	18.72	19.17
27	20.43	20.59	15.67	16.10	17.13	12.43	14.26	15.35	16.95	17.96	18.72	19.19
28	20.44	20.60	15.67	16.10	17.15	12.52	14.30	15.37	16.99	18.00	18.72	19.22
29	20.44	20.60	15.66	16.17	---	12.67	14.32	15.40	17.03	18.03	18.76	19.23
30	20.45	20.60	15.68	16.18	---	12.70	14.37	15.44	17.07	18.05	18.77	19.24
31	20.45	---	15.70	16.22	---	12.68	---	15.48	---	18.08	18.70	---
MAX	20.45	20.60	20.47	16.28	17.15	17.52	14.37	15.48	17.07	18.08	18.77	19.24

WTR YR 1978 MEAN 17.25 HIGH 12.43 LOW 20.60

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
JUN											
13...	1700	710	7.4	11.5	.2	350	5	92	30	4.1	1.3

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
JUN											
13...	425	0	349	27	31	2.4	.3	15	372	386	.00

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
JUN										
13...	.16	.07	.23	.23	1.0	.08	.00	0	30	2.5

GALLIA COUNTY

383638082103300. Local number, G-2.
LOCATION.--Lat 38°36'38", long 82°10'33", Hydrologic Unit 05090101, 5.9 mi (9.5 km) east of Crown City.
Owner: State of Ohio.
AQUIFER.--Sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled test water-table well, diameter 12 in (0.3 m), depth 65 ft, (19.8 m), cased.
DATUM.--Altitude of land-surface datum is 552 ft (168 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.
PERIOD OF RECORD.--June 1975 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum recorded daily low, 33.10 ft (10.089 m) Feb. 10-11, 1977; minimum recorded daily low 20.95 ft (6.386 m) Feb. 21, 1976.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 32.69 ft (9,964 m) Nov. 6; minimum daily low, 21.26 ft (6.480 m) Mar. 18.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31.91	32.48	29.22	28.37	24.73	30.86	23.25	26.86	27.83	29.68	30.68	31.38
2	31.79	32.55	28.81	28.75	25.11	30.72	23.56	27.19	28.39	30.12	30.80	31.25
3	31.47	32.64	27.93	29.00	25.84	30.91	23.94	27.83	28.68	30.10	30.94	31.61
4	31.04	32.62	27.76	29.26	26.51	31.01	24.10	28.19	28.83	29.31	31.13	31.72
5	31.16	32.66	27.60	29.56	27.05	30.93	24.14	27.96	28.90	28.52	31.09	31.79
6	31.15	32.69	27.16	29.74	27.61	31.12	23.97	27.57	29.31	28.53	31.18	31.85
7	31.19	32.45	26.34	29.74	27.93	31.12	24.00	27.51	29.50	28.95	31.02	31.90
8	31.33	32.22	26.69	29.79	28.11	31.19	23.62	27.81	29.28	29.41	30.38	31.94
9	31.44	31.42	27.62	29.06	28.01	30.93	23.46	27.20	28.42	29.31	30.23	31.94
10	31.11	30.58	27.60	27.63	28.44	30.06	23.72	26.59	28.11	29.93	30.26	32.06
11	30.45	30.25	27.81	26.51	28.57	29.46	24.35	25.85	28.37	29.97	29.93	32.10
12	30.15	30.17	28.49	26.86	28.72	28.18	24.46	26.23	28.81	30.11	29.86	32.10
13	30.24	30.30	28.95	27.51	29.07	27.16	24.95	26.36	28.96	30.36	30.15	32.03
14	30.62	30.74	29.01	27.68	29.16	25.54	25.36	26.29	29.07	30.54	30.09	32.18
15	30.97	30.97	28.73	27.80	29.39	24.45	26.09	25.97	29.49	30.21	30.48	32.14
16	31.24	31.03	27.22	28.26	29.58	22.51	26.55	25.03	29.77	30.18	30.74	32.14
17	31.30	31.11	25.91	28.89	29.57	21.45	27.11	24.63	29.80	30.17	30.85	32.12
18	31.32	31.01	25.76	29.11	29.84	21.26	27.59	24.30	29.81	30.19	31.14	32.14
19	31.32	30.50	25.96	28.54	29.88	22.20	27.64	23.31	29.90	30.62	31.24	32.21
20	31.57	30.17	26.22	28.57	30.21	22.88	27.32	22.74	29.81	30.63	31.23	32.06
21	31.67	30.45	26.19	29.13	30.32	23.73	27.06	23.44	29.59	30.91	31.45	32.17
22	32.00	30.56	26.22	29.14	30.34	23.75	26.86	23.87	29.80	30.92	31.59	32.08
23	32.03	30.57	26.42	29.53	30.48	23.48	26.68	24.45	30.02	31.07	31.65	32.20
24	32.06	30.39	26.51	29.71	30.51	23.10	26.88	24.69	30.14	31.10	31.68	32.27
25	32.10	29.80	26.91	29.41	30.74	22.93	27.10	24.77	30.42	31.13	31.73	32.32
26	32.29	29.96	26.94	27.11	30.53	22.81	27.18	24.46	30.55	31.16	31.80	32.30
27	32.35	29.90	26.92	24.63	30.60	22.10	25.89	24.73	30.23	31.19	31.83	32.36
28	32.32	30.12	27.06	22.51	30.73	21.31	24.84	25.75	29.91	31.26	31.78	32.38
29	32.22	30.14	27.51	22.53	---	21.46	25.34	26.69	29.46	31.28	31.89	32.34
30	32.37	29.81	27.81	24.08	---	21.85	26.08	27.25	29.41	31.30	31.84	32.42
31	32.47	---	28.11	24.42	---	22.41	---	27.39	---	31.15	31.77	---
MAX	32.47	32.69	29.22	29.79	30.74	31.19	27.64	28.19	30.55	31.30	31.89	32.42

WTR YR 1978 MEAN 28.87 HIGH 21.26 LOW 32.69

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
MAY 18...	1620	555	7.7	13.5	.2	250	6	78	14	9.0	1.8

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
MAY 18...	300	0	246	9.6	42	6.0	.1	13	311	314

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
MAY 18...	.01	.02	.15	.17	.18	.80	.02	.00	2600	7.0

HAMILTON COUNTY

390645084480500. Local number, H-21.
LOCATION.--Lat 39°06'45", long 84°48'05", Hydrologic Unit 05080002, on right bank of Ohio River, 0.7 mi (1.1 km) upstream from Great Miami River.
Owner: Dupont Corporation.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled industrial supply water-table well, diameter 16 in (0.41 m) depth 133 ft (40.54 m), screened below 117 ft (35.7 m).
PERIOD OF RECORD.--November 1964 to October 1974, November 1976 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)
OCT												
03...	--	1200	7.2	--	7	160	46	16	480	0	390	46
MAY												
09...	1015	884	7.2	15.0	15	95	30	22	320	0	260	32

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT												
03...	240	24	828	1.6	.00	1.6	.05	.00	10	460	1	150
MAY												
09...	140	35	628	1.4	.10	1.5	.01	.14	<10	7600	10	730

390653084485700. Local number, H-5.
LOCATION.--Lat 39°06'53", long 84°48'57", Hydrologic Unit 05080002, 3.1 mi (5.0 km) south of Elizabethtown.
Owner: E. I. Dupont de Nemours and Company.
AQUIFER.--Sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled test water-table well, diameter 8 in (0.20 m), depth 122 ft (37.2 m), cased to 122 ft (37.2 m).
DATUM.--Altitude of land-surface datum is 500 ft (152 m), from topographic map. Measuring point: Floor of shelter, 4.00 ft (1.219 m) above land-surface datum.
REMARKS.--Water levels affected by stages in the Ohio and Great Miami Rivers.
PERIOD OF RECORD.--April 1956 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 74.50 ft (22.708 m) Sept. 10-11, 1957; minimum daily low, 24.15 ft (7.361 m) Mar. 16, 1964.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 53.29 ft (16.243 m) Oct. 28; minimum daily low, 34.58 ft (10.540 m) Mar. 19.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51.35	53.17	49.84	49.60	42.31	51.28	43.75	49.50	51.64	52.23	52.35	51.92
2	50.86	52.10	49.02	49.59	43.78	51.24	44.73	50.43	51.86	52.21	52.24	51.96
3	51.24	52.06	48.46	49.94	44.64	51.15	44.77	50.74	52.06	52.04	52.50	52.08
4	51.25	52.04	47.86	50.09	45.80	51.31	45.50	51.07	52.15	52.04	52.45	52.33
5	51.22	52.02	47.40	50.31	47.20	51.32	45.82	50.99	52.32	51.86	52.52	52.36
6	51.49	51.98	45.87	50.51	47.68	51.29	45.97	50.97	52.38	51.51	52.63	52.40
7	51.51	51.88	45.27	50.52	48.26	51.36	46.30	50.58	52.43	51.77	52.56	52.28
8	51.52	51.84	46.76	50.17	48.97	51.34	46.20	50.64	52.55	52.23	52.26	52.54
9	51.58	51.46	47.70	48.83	49.36	51.51	45.92	50.45	52.37	52.44	52.00	52.61
10	52.35	50.85	48.16	47.66	49.38	51.18	45.94	49.41	51.89	52.45	52.06	52.64
11	52.40	50.42	48.80	46.31	49.82	50.63	46.89	48.43	51.50	52.53	52.16	52.84
12	52.32	50.36	48.99	45.78	50.05	49.16	47.51	48.52	51.76	52.57	52.01	52.73
13	52.41	50.44	47.88	47.42	50.22	46.51	48.04	48.65	51.97	52.42	51.99	52.68
14	52.62	50.79	47.17	48.36	50.61	43.26	48.19	48.67	52.06	52.49	52.08	52.86
15	52.90	51.05	46.45	48.72	50.70	38.56	48.66	48.50	52.22	52.53	52.10	52.92
16	53.01	51.19	45.16	49.07	50.42	36.31	49.12	48.21	52.25	52.32	52.33	52.78
17	53.05	51.21	43.54	49.59	50.39	35.02	49.51	47.58	52.12	52.40	52.39	52.86
18	53.05	51.23	44.45	49.70	50.44	34.58	49.57	47.34	52.12	52.50	52.53	52.76
19	53.02	51.25	45.52	49.82	50.36	35.37	49.58	47.43	52.23	52.57	52.60	52.96
20	53.03	50.96	46.20	49.62	50.38	37.19	49.65	47.00	52.19	52.73	52.56	52.91
21	53.09	50.73	46.42	49.32	50.61	38.79	50.33	46.32	52.12	52.60	52.77	52.85
22	53.15	50.81	46.92	49.23	50.64	40.86	50.35	47.83	52.16	52.71	52.86	52.81
23	53.28	51.05	47.55	49.09	50.67	43.55	50.30	48.69	52.31	52.63	52.78	52.68
24	53.25	51.04	48.05	48.46	50.85	43.64	50.27	49.29	52.30	52.75	52.59	52.91
25	53.13	50.75	48.18	48.65	51.20	43.41	50.66	49.32	52.25	52.48	52.54	52.79
26	53.04	50.59	48.22	47.20	51.25	42.78	50.58	49.35	52.41	52.66	52.46	52.81
27	53.21	50.72	48.24	41.74	51.09	41.42	50.27	49.20	52.38	52.74	52.56	52.76
28	53.29	50.94	---	38.28	51.15	40.67	48.89	49.44	52.51	52.58	52.54	52.96
29	53.09	50.95	48.49	36.81	---	40.14	47.18	50.31	52.36	52.62	52.64	52.83
30	53.23	50.91	49.03	35.77	---	40.66	47.99	51.04	52.20	52.49	52.63	52.86
31	53.17	---	49.26	38.73	---	42.01	---	51.41	---	52.44	52.24	---
MAX	53.29	53.17	49.84	50.52	51.25	51.51	50.66	51.41	52.55	52.75	52.86	52.96

WTR YR 1978 MEAN 49.90 HIGH 34.58 LOW 53.29

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
JUN											
01...	1445	985	7.1	14.5	.2	440	34	120	34	18	3.4

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
JUN										
01...	494	0	405	63	61	31	.1	10	525	524

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
JUN										
01...	.02	.03	.10	.13	.15	.66	.01	.00	2600	110

391039084291500. Local number, H-11.
LOCATION.--Lat 39°10'39", long 84°29'15", Hydrologic Unit 05090203, 5.6 mi (9.0 km) north of Riverfront Stadium in Cincinnati.
Owner: Procter and Gamble Company.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled test artesian well, diameter 6 in (0.15 m), depth 148 ft (45.1 m), cased.
DATUM.--Altitude of land-surface datum is 539 ft (164 m), from topographic map. Measuring point: Floor of instrument shelter 2.23 ft (0.680 m) above land-surface datum.
PERIOD OF RECORD.--August 1939 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 129.72 ft (39.539 m) Oct 25, 1948; minimum daily low, 81.80 ft (24.933 m) Jan. 26, 1978.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 84.05 ft (25.618 m) May 31; minimum daily low, 81.80 ft (24.933 m) Jan. 26.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82.84	82.99	82.47	82.93	82.86	82.75		---	82.49	82.44	82.49	82.57
2	82.80	82.99	82.53	82.83	82.89	82.78		---	82.46	82.29	82.48	82.46
3	82.91	82.96	82.60	82.89	82.95	82.58		82.57	82.50	82.39	82.48	82.38
4	82.98	82.99	82.69	82.94	82.98	82.57		82.42	82.49	82.55	82.62	82.35
5	83.01	83.00	82.69	82.94	82.98	82.65		82.12	82.40	82.62	82.58	82.36
6	83.06	82.99	82.46	82.91	82.89	82.69		82.28	82.45	82.56	82.53	82.33
7	83.09	82.83	82.71	82.81	82.90	82.74		82.37	82.31	82.51	82.49	82.29
8	83.00	82.77	82.79	82.67	82.91	82.75		82.37	82.33	82.45	82.55	82.28
9	82.78	82.79	82.87	82.63	82.91	82.74		82.28	82.64	82.45	82.46	82.30
10	82.85	82.81	83.05	82.78	82.84	82.62		82.36	82.70	82.50	82.40	82.29
11	82.89	82.90	83.14	82.89	82.76	82.57		82.41	82.55	82.57	82.42	82.19
12	82.95	83.01	83.14	82.92	82.76	82.58		82.41	82.49	82.58	82.40	82.21
13	83.02	83.11	82.96	82.83	82.72	82.63		82.21	82.67	82.43	82.48	82.25
14	83.03	83.12	82.77	82.68	82.36	82.35		82.07	82.74	82.40	82.49	82.26
15	83.02	83.02	82.73	82.70	82.49	82.40		82.13	82.67	82.34	82.42	82.35
16	82.95	82.84	82.74	82.77	82.58	82.51		82.20	82.55	82.34	82.32	82.15
17	82.96	82.75	82.74	82.77	82.65	82.60		82.28	82.58	82.46	82.45	82.23
18	82.89	82.84	82.64	82.78	82.68	82.69		82.37	82.51	82.54	82.42	82.34
19	82.83	82.94	82.68	82.81	82.69	82.70		82.43	82.51	82.54	82.54	82.41
20	82.92	82.97	82.67	82.76	82.69	82.72		82.45	82.44	82.52	82.67	82.33
21	82.98	83.01	82.70	82.73	82.69	82.62		82.47	82.46	82.50	82.61	82.42
22	83.02	83.05	82.79	82.84	82.72	82.57		82.50	82.56	82.54	82.49	82.61
23	83.06	83.05	82.83	82.89	82.72	---		82.50	82.57	82.56	82.45	82.60
24	83.08	82.92	82.84	82.89	82.62	---		82.40	82.51	82.62	82.37	82.36
25	83.09	82.92	82.64	82.53	82.61	---		82.44	82.41	82.46	82.31	82.34
26	82.92	82.76	82.73	81.80	82.70	---		82.48	82.33	82.33	82.34	82.34
27	82.87	82.79	82.82	82.12	82.76	---		82.50	82.47	82.33	82.31	82.18
28	82.91	82.87	82.90	82.39	82.76	---		82.50	82.57	82.52	82.23	82.30
29	82.96	82.97	82.92	82.59	---	---		82.45	82.51	82.45	82.38	82.27
30	82.98	82.97	82.93	82.73	---	---		82.40	82.46	82.38	82.39	82.14
31	82.98	---	82.95	82.81	---	---		84.05	---	82.40	82.46	---
MAX	83.09	83.12	83.14	82.94	82.98	82.78		84.05	82.74	82.62	82.67	82.61

WTR YR 1978 MEAN 82.63 HIGH 81.80 LOW 84.05

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
MAY 31...	2050	7.4	12.5	.2	310	0	78	28	330	3.4

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
MAY 31...	590	0	484	38	290	200	.1	17	1200	1240

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
MAY 31...	.00	.41	.43	.84	.84	3.7	.05	.00	1900	1100

391324084272500. Local number, H-9.
LOCATION.--Lat 39°13'24", long 84°27'25", Hydrologic Unit 05090203, 9.1 mi (14.6 km) north of Riverfront Stadium in Cincinnati.
Owner: Diamond National Corporation.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in (0.25 m), depth drilled 168 ft (51.2 m) present depth 163 ft (49.7 m), cased.
DATUM.--Altitude of land-surface datum is 555.30 ft (169.255 m). Measuring point: Floor of instrument shelter, 2.76 ft (0.841 m) above land-surface datum.
PERIOD OF RECORD.--July 1938 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 136.80 ft (41.697 m) Nov. 9, 1947, Feb. 15, 1948; minimum daily low, 79.55 ft (24.247 m) Sept. 30, 1978.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 82.28 ft (25.079 m) Oct. 4; minimum daily low, 79.55 ft (24.247 m) Sept. 30.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81.58	81.70	81.13	80.72	80.93	80.67	80.64	80.24	80.14	80.08	80.08	80.09
2	82.04	81.70	81.31	80.80	80.89	80.65	80.84	80.38	80.14	79.84	80.00	79.97
3	82.24	81.60	81.14	81.16	80.93	80.26	80.54	80.18	80.14	79.94	80.01	79.86
4	82.28	81.70	81.14	81.23	80.86	80.67	80.54	79.85	80.10	80.10	80.18	79.56
5	82.14	81.70	81.00	81.10	80.51	80.76	80.75	80.03	80.00	80.27	80.04	79.72
6	82.20	81.54	81.70	81.00	80.70	80.76	80.50	80.36	80.10	80.16	79.94	79.72
7	82.14	81.40	81.81	80.91	80.81	80.84	80.75	80.34	80.05	80.14	79.95	79.72
8	81.60	81.58	81.71	80.50	80.63	80.63	80.70	79.90	80.04	80.00	79.97	79.83
9	81.44	81.60	81.87	81.10	80.47	80.61	80.61	80.04	80.23	80.00	79.87	79.89
10	81.71	81.60	81.87	81.40	80.37	80.48	80.08	80.41	80.27	80.10	79.84	79.86
11	81.88	81.85	81.87	81.43	80.37	80.50	80.39	80.38	80.25	80.00	79.85	79.82
12	82.00	81.88	81.27	81.30	80.38	80.60	80.41	80.14	80.18	80.00	79.66	79.86
13	82.00	81.81	81.06	80.85	80.14	80.61	80.56	79.78	80.39	80.00	79.70	79.92
14	81.88	81.60	81.10	80.82	80.44	80.62	80.71	79.70	80.47	79.98	79.70	79.90
15	81.70	81.38	81.30	81.16	80.51	80.84	80.70	79.90	80.29	79.90	79.66	80.00
16	81.40	81.20	81.18	81.25	80.47	80.87	80.75	80.10	80.23	79.90	79.58	79.80
17	81.60	81.44	80.79	80.98	80.49	81.01	80.36	80.38	80.11	80.10	79.76	79.90
18	81.40	81.80	80.80	81.10	80.38	81.00	80.07	80.50	80.10	80.18	79.74	80.04
19	81.67	81.82	80.87	80.93	80.28	80.61	80.06	80.60	80.18	80.10	79.78	80.14
20	81.90	81.39	80.81	80.76	80.18	80.61	80.38	80.40	80.05	80.10	79.84	80.04
21	81.99	81.64	80.88	80.98	80.31	80.61	80.68	80.10	80.07	80.00	79.90	79.94
22	81.74	81.62	81.10	81.04	80.40	80.70	80.76	80.20	80.28	80.10	79.74	80.14
23	81.69	81.22	80.84	81.11	80.17	80.76	80.38	80.10	80.24	80.00	79.68	80.14
24	81.90	81.28	80.79	80.70	80.19	80.86	80.39	80.14	80.21	80.20	79.69	79.83
25	81.61	80.95	80.86	80.14	80.32	80.64	80.34	80.28	80.16	79.94	79.59	79.79
26	81.51	81.11	80.90	80.30	80.49	80.49	80.44	80.24	80.14	79.80	79.62	79.80
27	81.68	81.09	81.01	80.73	80.47	80.60	80.54	80.14	80.15	79.84	79.60	79.65
28	81.78	81.69	81.01	80.81	80.22	80.67	80.54	79.80	80.29	80.01	79.64	79.76
29	81.60	81.66	80.84	80.90	---	80.90	80.44	79.70	80.22	79.90	79.83	79.79
30	81.60	81.25	80.76	81.11	---	80.98	80.00	79.84	80.11	79.85	79.85	79.55
31	81.78	---	80.80	80.91	---	80.65	---	80.08	---	79.95	79.91	---
MAX	82.28	81.88	81.87	81.43	80.93	81.01	80.84	80.60	80.47	80.27	80.18	80.14

WTR YR 1978 MEAN 80.59 HIGH 79.55 LOW 82.28

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
MAY 23...	1620	1090	7.1	16.0	.3	410	100	100	38	40	3.4

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
MAY 23...	370	0	303	47	97	65	.3	12	626	541

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
MAY 23...	.04	.40	.10	.50	.54	2.4	.00	.00	2600	180

391634084152600. Local number, H-22.
LOCATION.--Lat 39°16'34", long 84°15'26", Hydrologic Unit 05090202, on right bank of Little Miami River 0.5 mi (0.8 km) upstream from McKinney Road bridge at Loveland.
Owner: Loveland Water Works.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled public supply water-table well, diameter 24 in (0.61 m), depth 70 ft (21.3 m) screened below 48 ft (14.6 m).
PERIOD OF RECORD.--June 1967 to Sept. 1974, June to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)
OCT												
03...	--	752	7.6	--	--	90	23	24	330	0	270	13
APR												
13...	--	697	7.3	13.0	3	84	21	16	316	0	260	25
SEP												
27...	1055	708	7.6	17.0	0	90	22	16	326	0	270	13

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT												
03...	53	48	439	.43	.00	.43	.02	.02	<10	0	2	0
APR												
13...	56	38	435	.42	.00	.42	.01	.02	<10	230	0	10
SEP												
27...	54	37	391	.88	.00	.88	.01	.03	<10	340	3	10

391748084393800. Local number, H-19.
LOCATION.--Lat 39°17'48", long 84°39'38", Hydrologic Unit 05080002, on left bank of Great Miami River 1.3 mi (2.1 km) southwest of Venice.
Owner: Southwest Ohio Water Company.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Collector-type industrial supply water-table well, diameter 20 ft (6.1 m), depth 144 ft (43.9 m) horizontal intakes at 95-100 ft (29.0-30.5 m).
PERIOD OF RECORD.--1964 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)
NOV										
15...	1345	850	7.5	15.0	370	97	30	352	0	290
FEB										
23...	1230	820	7.5	13.5	360	94	30	320	0	260
MAY										
24...	1200	750	7.5	14.0	320	86	26	308	0	250
AUG										
02...	1200	770	7.5	14.0	340	91	27	316	0	260

DATE	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
NOV										
15...	18	79	50	.1	566	.84	.01	1	1	10
FEB										
23...	16	88	47	.2	483	2.4	.01	--	--	--
MAY										
24...	16	78	41	.1	475	2.5	.02	--	--	--
AUG										
02...	16	73	42	.1	500	1.6	.01	0	0	7

DATE	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
NOV									
15...	0	4	4	50	5	5	390	90	80
FEB									
23...	--	--	--	90	--	--	320	--	--
MAY									
24...	--	--	--	70	--	--	270	--	--
AUG									
02...	<10	6	6	80	2	2	300	40	20

391817084193300. Local number, H-4.
LOCATION.--Lat 39°18'17", long 84°39'33", Hydrologic Unit 05080002, 0.7 mi (1.1 km) southwest of Ross.
Owner: Southwestern Ohio Water Company.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in (0.15 m), depth 100 ft (30.3 m), cased.
DATUM.--Altitude of land-surface datum is 541.57 ft (165.071 m). (Levels by Miami Conservancy District.)
Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.
PERIOD OF RECORD.--December 1954 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 32.16 ft (9.802 m) Nov. 20, 1971; minimum daily low, 11.60 ft (3.536 m) June 16, 1958.
EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 30.01 ft (9.147 m) Oct. 1; minimum recorded daily low, 14.38 ft (4.383 m) Mar. 28.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30.01	29.25			---	20.84	---	18.56	19.99	21.76	23.45	25.20
2	29.92	29.33			---	20.88	---	18.85	20.10	21.83	23.50	25.07
3	29.55	29.41			---	20.95	---	19.06	20.20	21.73	23.56	24.85
4	29.42	29.50			---	21.01	---	19.21	20.23	21.73	23.56	24.60
5	29.39	29.52			---	21.05	---	19.29	20.33	21.53	23.58	24.55
6	29.36	29.53			---	21.12	---	19.49	20.45	21.62	23.63	24.65
7	29.31	29.37			---	21.18	---	19.49	20.47	21.75	23.70	24.73
8	29.30	29.38			---	21.26	---	19.48	20.28	21.89	23.77	24.76
9	29.10	29.44			---	21.34	---	19.65	20.14	21.96	23.87	24.86
10	28.85	29.52			---	21.41	---	19.81	20.04	22.01	23.98	24.99
11	28.79	29.61			---	21.42	---	19.93	20.30	22.09	24.10	25.06
12	28.88	29.61			---	21.38	---	19.99	20.55	22.16	24.18	25.09
13	28.92	29.47			---	21.25	---	20.02	20.72	22.24	24.26	25.13
14	28.97	29.28			---	20.95	---	20.01	20.89	22.33	24.28	25.21
15	28.99	29.34			---	20.19	---	19.68	21.01	22.45	24.36	25.30
16	28.92	29.46			---	18.45	---	19.57	21.13	22.48	24.46	25.42
17	28.76	29.53			---	17.00	---	19.54	21.27	22.48	24.55	25.43
18	28.85	29.57			---	16.31	18.98	19.53	21.32	22.55	24.65	25.47
19	28.97	29.57			---	15.81	19.16	19.49	21.27	22.62	24.74	25.50
20	29.08	29.41			---	15.54	19.28	19.56	21.30	22.67	24.82	25.52
21	29.15	29.22			20.44	15.27	19.29	19.55	21.31	22.74	24.88	25.56
22	29.17	29.28			20.47	15.16	18.65	19.49	21.33	22.82	24.88	25.63
23	29.21	29.28			20.49	14.91	18.25	19.59	21.39	22.96	24.89	25.70
24	29.18	29.28			20.52	14.81	18.51	19.88	21.54	23.09	24.97	25.78
25	29.13	29.28			20.58	14.73	18.66	19.99	21.60	23.08	25.05	25.87
26	29.18	28.98			20.64	14.67	18.67	19.62	21.55	23.09	25.12	25.92
27	29.18	28.80			20.68	14.46	18.61	19.83	21.40	23.14	25.23	25.99
28	29.21	---			20.71	14.38	18.51	19.84	21.37	23.20	25.30	26.07
29	29.25	---			---	14.66	18.12	19.52	21.48	23.26	25.30	26.17
30	29.27	---			---	14.77	18.18	19.67	21.62	23.35	25.33	26.24
31	29.21	---			---	---	---	19.84	---	23.39	25.33	---
MAX	30.01	29.61			20.71	21.42	19.29	20.02	21.62	23.39	25.33	26.24

WTR YR 1978 MEAN 23.28 HIGH 14.38 LOW 30.01
NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
MAY											
24...	1840	610	7.5	12.0	.2	280	45	76	23	3.2	1.7

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
MAY											
24...	292	0	239	15	65	9.3	.1	9.9	378	332	.04

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
MAY										
24...	.01	.09	.10	.14	.62	.03	.00	160	10	8.5

401853080361100. Local number JE-10.
LOCATION.--Lat 40°18'53", long 80°36'11", Hydrologic Unit 05030101, on right bank of Ohio River 0.4 mi (0.6 km) upstream from Cross Creek, at Mingo Junction.
Owner: City of Mingo Junction.
AQUIFER.--Sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Collector type public supply water-table well, diameter 13 ft (4.0 m), depth 74 ft (22.6 m), cased.
PERIOD OF RECORD.--June 1967 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)
MAY										
02...	616	7.0	10	73	12	31	92	0	75	15

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
MAY										
02...	160	39	398	.05	.01	.06	.92	.01	370	1600

395740083255700. Local number, M-3.
LOCATION.--Lat 39°57'40", long 83°25'57", Hydrologic Unit 05060002, 5.2 mi (8.4 km) north of London.
Owner: State of Ohio.
AQUIFER.--Limestone of Silurian Age.
WELL CHARACTERISTICS.--Drilled test artesian well, diameter 12 in (0.3 m), depth 290 ft (88.4 m) cased to 145 ft (44.2 m).
DATUM.--Altitude of land-surface datum is 1,020 ft (311 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.
PERIOD OF RECORD.--November 1974 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 9.13 ft (2.783 m) Feb. 7-8, 1977; minimum daily low, 3.93 ft (1.198 m) Feb. 25, 1975.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 8.96 ft (2.731 m) Sept. 29; minimum daily low, 4.56 ft (1.390 m) Mar. 28.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.89	6.56	5.83	5.46	5.68	6.71	4.75	5.17	5.67	6.18	---	7.96
2	7.47	6.56	5.64	5.59	5.75	6.69	4.92	5.25	5.73	6.28	---	8.00
3	7.09	6.55	5.40	5.73	5.83	6.60	4.94	5.35	5.79	6.33	---	8.01
4	6.87	6.60	5.34	5.76	5.84	6.73	5.01	5.28	5.68	6.33	---	8.02
5	6.73	6.61	5.17	5.76	5.81	6.77	5.09	5.29	5.66	6.36	---	8.06
6	6.77	6.57	5.12	5.76	5.86	6.82	5.03	5.51	5.76	6.42	---	8.09
7	6.69	6.49	5.22	5.74	5.90	6.82	5.12	5.56	5.74	6.48	7.08	8.21
8	6.44	6.55	5.17	5.63	5.93	6.74	5.12	5.54	5.63	6.54	7.14	8.27
9	6.28	6.53	5.38	5.47	5.93	6.70	5.08	5.44	5.73	6.60	7.14	8.30
10	6.24	6.59	5.48	5.51	5.92	6.64	4.99	5.58	5.83	6.62	7.17	8.30
11	6.16	6.69	5.48	5.52	5.96	6.67	5.05	5.64	5.88	6.64	7.18	8.43
12	6.20	6.82	5.47	5.50	5.99	6.73	5.11	5.61	5.84	6.63	7.21	8.50
13	6.19	6.82	5.42	5.40	5.94	6.76	5.25	5.52	6.12	6.76	7.33	8.47
14	6.18	6.78	5.36	5.43	6.07	6.41	5.38	5.35	6.09	6.76	7.35	8.47
15	6.11	6.67	5.18	5.61	6.14	6.31	5.45	5.29	6.08	6.83	7.40	8.52
16	6.15	6.59	4.97	5.68	6.17	6.02	5.49	5.16	6.09	6.85	7.45	8.50
17	6.23	6.52	4.79	5.64	6.23	5.76	5.51	5.09	6.16	6.94	7.47	8.59
18	6.29	6.61	4.68	5.76	6.21	5.69	5.44	5.06	6.12	7.04	7.59	8.62
19	6.30	6.68	4.67	5.74	6.23	5.52	5.26	5.08	6.11	7.11	7.63	8.61
20	6.36	6.56	4.70	5.70	6.27	5.48	5.18	5.06	6.11	7.12	7.64	8.66
21	6.43	6.51	4.80	5.86	6.32	5.26	5.12	5.12	6.18	7.13	7.66	8.70
22	6.44	6.45	4.98	5.94	6.37	5.24	5.21	5.15	6.17	---	7.66	8.67
23	6.47	6.22	5.05	5.93	6.35	5.09	5.20	5.15	6.18	---	7.67	8.68
24	6.50	6.16	5.03	5.89	6.39	5.05	5.15	5.13	6.25	---	7.74	8.73
25	6.44	6.10	5.13	5.76	6.44	4.92	5.15	5.20	6.27	---	7.78	8.71
26	6.38	6.15	5.16	5.45	6.54	4.75	5.11	5.25	6.28	---	7.71	8.77
27	6.40	6.15	5.29	5.53	6.57	4.61	5.07	5.29	6.31	---	7.77	8.88
28	6.47	6.32	5.31	5.58	6.55	4.56	5.07	5.38	6.12	---	7.88	8.94
29	6.49	6.33	5.35	5.62	---	4.62	5.09	5.50	6.19	---	7.87	8.96
30	6.52	6.22	5.42	5.66	---	4.68	5.11	5.57	6.18	---	7.92	8.85
31	6.56	---	5.48	5.67	---	4.65	---	5.49	---	---	7.93	---
MAX	7.89	6.82	5.83	5.94	6.57	6.82	5.51	5.64	6.31	7.13	7.93	8.96

WTR YR 1978 MEAN 6.21 HIGH 4.56 LOW 8.96

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
JUN 13...	1245	965	7.4	11.5	.2	420	82	86	49	29	2.4

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
JUN 13...	408	0	335	26	170	6.9	1.1	8.8	562	555	.00

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
JUN 13...	.52	.01	.53	.53	2.3	.01	.00	220	50	1.2

410042080453800. Local number, MA-1.
LOCATION.--Lat 41°00'42", long 80°45'38", Hydrologic Unit, 05030103, in county fairgrounds at south edge of Canfield.
Owner: Canfield Water Department.
AQUIFER.--Sandstone of Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (0.2 m), depth 170 ft (51.8 m) cased to 99.5 ft (30.3 m).
DATUM.--Altitude of land-surface datum is 1,160 ft (354 m), from topographic map. Measuring point: Floor of instrument shelter at land-surface datum.
REMARKS.--Influenced by seasonal water demand at county fairgrounds.
PERIOD OF RECORD.--May 1946 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 110.75 ft (33.757 m) Sept. 18, 1946; minimum daily low, 30.35 ft (9.251 m) Apr. 23, 1951.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 49.77 ft (15.170 m) Aug. 31; minimum daily low, 33.23 ft (10.129 m) Jan. 26.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			---	34.34	33.59	34.82	34.09	34.63	34.63	35.21	35.44	47.78
2			---	34.26	33.59	34.63	34.10	34.93	34.68	35.17	35.49	41.83
3			---	34.27	33.70	34.41	34.05	34.95	34.67	35.00	35.48	39.27
4			---	34.26	33.84	34.55	33.90	34.99	34.59	35.09	35.53	38.22
5			---	34.27	33.90	34.92	33.95	35.04	34.62	35.17	---	37.65
6			---	34.25	33.94	34.91	33.95	35.06	34.67	35.23	---	37.31
7			---	34.24	34.00	34.87	33.95	35.02	36.38	35.27	---	37.09
8			---	34.17	34.02	34.80	33.96	34.96	35.59	35.26	---	36.97
9			---	33.89	34.01	34.74	33.94	34.78	35.13	35.24	---	36.80
10			---	34.01	34.00	34.69	33.87	34.93	35.11	35.29	---	36.61
11			---	34.03	33.99	34.68	33.87	35.07	35.05	35.35	---	36.44
12			---	34.04	33.96	34.09	33.90	36.11	35.02	35.40	---	36.38
13			---	34.02	33.94	34.25	33.93	38.24	35.03	35.39	---	36.36
14			---	33.98	33.95	33.86	33.94	36.53	35.08	35.30	---	36.33
15			---	33.94	33.97	34.23	33.94	35.65	35.09	35.31	---	36.18
16			---	33.96	33.96	34.30	33.88	35.26	35.09	35.30	---	36.17
17			---	33.95	33.96	34.36	33.87	35.22	35.10	35.33	37.73	36.14
18			---	33.92	33.94	34.41	33.85	35.08	35.06	35.41	37.82	36.24
19			---	33.91	33.89	34.26	33.78	35.07	34.97	35.46	37.87	36.26
20			34.52	33.85	33.88	34.26	33.71	34.98	35.02	35.47	37.91	36.24
21			34.55	33.81	33.90	34.23	33.74	36.11	35.05	35.40	37.92	36.18
22			34.61	33.81	33.91	34.33	33.75	35.68	35.09	35.34	37.94	36.12
23			34.60	33.79	33.89	34.42	33.72	35.54	35.18	35.31	37.96	36.12
24			34.59	33.78	33.90	34.42	33.65	35.09	35.16	35.19	38.12	36.04
25			34.43	33.72	34.07	34.39	33.69	34.98	35.12	35.25	38.12	36.00
26			34.43	33.23	37.29	34.23	33.70	34.94	35.01	35.28	39.29	36.00
27			34.45	33.50	36.16	34.01	33.70	34.90	35.02	35.37	39.96	36.02
28			34.45	33.55	35.23	34.12	33.71	34.82	35.09	35.42	40.69	36.13
29			34.44	33.57	---	34.18	33.71	34.57	35.16	35.41	40.86	36.14
30			34.42	33.58	---	34.19	33.68	34.52	35.19	35.38	42.05	36.14
31			34.42	33.59	---	34.17	---	34.58	---	35.39	49.77	---
MAX			34.61	34.34	37.29	34.92	34.10	38.24	36.38	35.47	49.77	47.78

WTR YR 1978 MEAN 35.13 HIGH 33.23 LOW 49.77

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
JUN											
07...	1810	740	8.4	11.5	.3	10	0	2.4	1.0	180	2.4

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
JUN											
07...	426	10	366	2.8	3.8	11	1.0	8.9	417	431	.01

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
JUN										
07...	.22	.15	.37	.38	1.7	.01	.00	140	10	6.1

MARION COUNTY

403413083170500. Local number, MR-4.
LOCATION.--Lat 40°34'13", long 83°17'05", Hydrologic Unit 05060001, 1.9 mi (3.1 km) southeast of New Bloomington. Owner: State of Ohio.
AQUIFER.--Limestone of Silurian Age.
WELL CHARACTERISTICS.--Drilled test artesian well, diameter 12 in (0.3 m), depth drilled 290 ft (88.4 m), present depth 286 ft (87.2 m), cased to 33 ft (10.1 m).
DATUM.--Altitude of land-surface datum is 915.96 ft (279.185 m). Measuring point: Floor of shelter 3.00 ft (0.914 m) above land-surface datum.
REMARKS.--Influenced by seasonal water demand for nearby wildlife refuge.
PERIOD OF RECORD.--January 1973 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 20.91 ft (6.373 m) Sept. 25, 1978. minimum daily low, 0.61 ft (0.186 m) Mar. 18, 1974.
EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 20.91 ft (6.373 m) Sept. 25; minimum daily low, 3.77 ft (1.149 m) Mar. 28.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			---	6.37	6.15	6.75	4.22	5.29	5.82	7.03	18.33	16.79
2			---	6.50	6.14	6.74	4.35	5.41	5.90	6.99	18.39	18.42
3			---	6.65	6.17	6.64	4.39	5.47	5.96	6.98	18.45	18.97
4			---	6.67	6.15	6.77	4.47	5.45	5.98	6.93	18.54	19.10
5			---	6.68	6.06	6.77	4.54	5.63	6.09	6.93	18.56	12.82
6			---	6.70	6.09	6.84	4.52	5.80	6.21	6.95	18.61	11.30
7			---	6.66	6.13	6.87	4.55	5.81	6.17	6.97	18.59	16.97
8			---	6.62	6.13	6.83	4.48	5.71	6.16	6.99	18.65	18.53
9			---	6.55	6.13	6.79	4.54	5.80	6.27	7.03	12.75	19.20
10			---	6.65	6.10	6.70	4.48	5.93	6.31	7.09	10.72	19.52
11			---	6.67	6.11	6.72	4.64	5.96	6.32	7.16	13.36	19.72
12			---	6.63	6.16	6.80	4.70	5.91	6.34	7.20	10.22	19.97
13			---	6.46	6.14	6.80	4.93	5.80	6.41	7.19	9.34	20.06
14			---	6.41	6.29	6.48	5.07	5.78	6.38	7.22	15.82	18.10
15			---	6.54	6.37	6.30	5.19	5.74	6.39	7.25	16.53	17.68
16			---	6.59	6.40	5.39	5.26	5.74	6.40	7.32	10.63	19.31
17			---	6.55	6.44	4.77	5.32	5.76	6.46	7.46	9.63	19.91
18			---	6.66	6.42	4.56	5.27	5.79	6.49	14.51	9.29	19.99
19			---	6.63	6.42	4.45	5.14	5.77	6.55	16.62	9.09	19.02
20			---	6.56	6.46	4.43	5.01	5.69	6.55	15.57	9.07	19.93
21			---	6.72	6.49	4.18	4.81	5.80	6.57	15.74	9.72	20.40
22			---	6.78	6.52	4.10	4.70	5.79	6.64	16.02	8.99	20.67
23			---	6.78	6.51	3.98	4.67	5.76	6.67	16.05	8.93	20.74
24			---	6.74	6.49	4.05	4.72	5.74	6.71	16.97	15.86	20.83
25			---	6.58	6.58	4.01	4.74	5.64	6.72	17.31	16.88	20.91
26			---	6.33	6.67	4.02	4.82	5.61	6.73	17.48	17.96	14.09
27			---	6.40	6.69	3.92	4.92	5.61	6.83	17.73	18.48	12.51
28			---	6.38	6.64	3.77	4.99	5.63	6.92	17.89	18.78	11.82
29			---	6.30	---	3.97	5.05	5.64	6.95	17.99	18.96	11.41
30			6.33	6.28	---	4.02	5.15	5.67	6.99	18.09	14.69	11.07
31			6.38	6.18	---	3.99	---	5.75	---	18.19	17.92	---
MAX			6.38	6.78	6.69	6.87	5.32	5.96	6.99	18.19	18.96	20.91

WTR YR 1978 MEAN 6.78 HIGH 3.77 LOW 20.91
NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
JUN 05...	1400	970	7.6	11.5	.2	480	190	111	49	17	3.0

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
JUN 05...	350	0	287	14	190	8.6	1.8	11	606	564	.00

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
JUN 05...	.32	.04	.36	.36	1.6	.00	.00	130	10	2.0

MIAMI COUNTY

395848084085500. Local number, MI-3.
LOCATION.--Lat 39°58'48", long 84°08'55", Hydrologic Unit 05080001, 2.0 mi (3.2 km) northeast of Tipp City.
Owner: Fulton Fruit Farms.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 5 in (0.13 m), depth 48 ft (14.6 m), cased.
DATUM.--Altitude of land-surface datum is 804.78 ft (245.297 m). (Levels by Miami Conservancy District.)
Measuring point: Floor of shelter 3.50 ft (1.067 m) above land-surface datum.
PERIOD OF RECORD.--October 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 15.61 ft (4.758 m) Feb. 4, 1971; minimum daily low, 7.53 ft (2.295 m) Feb. 25, 1975.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 12.52 ft (3.816 m) Oct. 1; minimum daily low, 8.36 ft (2.548 m) Mar. 27.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.52	12.48	12.32	10.25	10.15	10.87	8.73	9.53	10.34	11.14	12.22	10.24
2	12.45	12.49	12.16	10.29	10.16	10.88	8.81	9.60	10.39	10.95	12.21	10.20
3	12.42	12.49	12.10	10.34	10.17	10.91	8.89	9.66	10.39	10.93	11.76	10.23
4	12.41	12.50	12.06	10.37	10.18	10.94	8.97	9.67	10.40	10.94	11.03	10.27
5	12.42	12.50	12.02	10.40	10.19	10.96	9.03	9.72	10.44	10.95	10.97	10.32
6	12.42	12.50	11.89	10.43	10.21	10.99	9.03	9.78	10.56	10.96	10.97	10.37
7	12.43	12.50	11.82	10.45	10.23	11.01	9.07	9.79	10.45	11.11	10.95	10.50
8	12.42	12.51	11.77	10.43	10.24	11.03	9.14	9.90	10.37	11.29	11.12	10.53
9	12.40	12.50	11.74	10.39	10.25	11.04	9.18	9.92	10.40	11.37	11.14	10.59
10	12.38	12.51	11.73	10.44	10.28	11.07	9.23	10.02	10.41	11.47	11.12	10.59
11	12.37	12.51	11.71	10.46	10.31	11.08	9.29	10.05	10.44	11.55	11.15	10.62
12	12.38	12.52	11.68	10.47	10.33	11.08	9.35	10.04	10.46	11.54	11.04	10.66
13	12.38	12.52	11.67	10.50	10.35	10.99	9.43	10.01	10.49	11.59	11.06	10.70
14	12.38	12.52	11.49	10.54	10.41	10.40	9.49	10.01	10.51	11.82	11.07	10.74
15	12.39	12.51	10.50	10.58	10.45	8.68	9.55	10.02	10.53	11.89	11.09	10.91
16	12.39	12.51	10.18	10.60	10.48	8.45	9.60	10.04	10.64	11.99	11.09	10.93
17	12.40	12.51	10.07	10.62	10.52	8.51	9.65	10.06	10.74	11.95	11.09	10.84
18	12.41	12.50	10.01	10.66	10.55	8.57	9.66	10.08	10.77	11.79	11.09	10.87
19	12.42	12.49	10.00	10.67	10.59	8.63	9.71	10.11	10.65	12.11	11.10	11.12
20	12.42	12.48	10.00	10.71	10.62	8.65	9.71	10.19	10.73	12.17	11.11	11.14
21	12.43	12.48	10.02	10.75	10.65	8.62	9.67	10.17	10.71	12.03	11.12	11.03
22	12.44	12.46	10.05	10.77	10.67	8.56	9.69	10.18	10.71	12.16	11.14	11.05
23	12.44	12.44	10.08	10.79	10.71	8.60	9.71	10.18	10.73	12.28	11.15	11.21
24	12.45	12.43	10.08	10.79	10.72	8.63	9.72	10.18	10.74	11.88	11.22	11.28
25	12.45	12.43	10.06	10.79	10.77	8.62	9.72	10.16	10.89	11.85	11.44	11.14
26	12.46	12.43	10.06	10.55	10.79	8.44	9.56	10.19	10.95	11.82	11.50	11.19
27	12.46	12.43	10.11	10.31	10.87	8.36	9.49	10.22	11.05	11.81	11.29	11.21
28	12.46	12.44	10.13	10.23	10.84	8.40	9.46	10.21	11.02	11.80	11.27	11.21
29	12.47	12.44	10.17	10.19	---	8.50	9.45	10.25	11.01	11.86	11.04	11.26
30	12.47	12.43	10.19	10.17	---	8.55	9.48	10.29	11.12	12.11	11.00	11.25
31	12.47	---	10.21	10.15	---	8.61	---	10.31	---	12.17	10.55	---
MAX	12.52	12.52	12.32	10.79	10.87	11.08	9.72	10.31	11.12	12.28	12.22	11.28

WTR YR 1978 MEAN 10.84 HIGH 8.36 LOW 12.52

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
MAY											
30...	1430	640	7.4	12.5	.0	300	20	72	30	4.2	.8

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
MAY										
30...	346	0	284	22	42	1.8	.9	14	334	338

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
MAY										
30...	.00	.07	.07	.14	.14	.62	.00	.00	1800	20

400208084112900. Local number, MI-44.
LOCATION.--Lat 40°02'08", long 84°11'29", Hydrologic Unit 05080001, on left bank of Great Miami River 0.7 mi (1.1 km) east of city hall in Troy.
Owner: City of Troy.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled public supply water-table well, diameter 26 in (0.66 m), depth 105 ft (32.0 m) screened below 89 ft (27.1 m).
PERIOD OF RECORD.--August 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)
NOV										
16...	1030	560	7.6	13.0	310	73	31	368	0	300
FEB										
22...	1330	702	7.4	11.5	330	76	33	356	0	290
MAY										
23...	1200	680	7.6	15.0	310	71	32	356	0	290
AUG										
01...	1000	700	7.5	14.0	320	75	33	381	0	310

DATE	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
NOV										
16...	15	58	23	.2	430	.01	.00	2	1	20
FEB										
22...	23	64	22	.8	429	.01	.00	--	--	--
MAY										
23...	14	64	22	.5	561	.03	.00	--	--	--
AUG										
01...	19	60	20	1.3	435	.00	.00	1	1	5

DATE	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
NOV									
16...	0	18	0	1500	3	3	40	130	80
FEB									
22...	--	--	--	1400	--	--	40	--	--
MAY									
23...	--	--	--	1400	--	--	40	--	--
AUG									
01...	<10	5	5	1500	2	0	40	20	10

393853084170700. Local number, MT-63.
LOCATION.--Lat 39°38'53", long 84°17'07", Hydrologic Unit 05080002, on left bank of Great Miami River 0.4 mi (0.6 km) north of city hall in Miamisburg.
Owner: Miamisburg Box Board Company.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled industrial supply water-table well, diameter 16 in (0.41 m), depth 95 ft (29.0 m) cased below 73 ft (22.3 m).
PERIOD OF RECORD.--September 1972 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)
NOV										
15...	1930	960	7.2	13.0	400	100	37	432	0	350
FEB										
22...	1800	984	7.3	11.5	430	110	38	432	0	350
AUG										
01...	1300	1080	7.0	16.0	430	110	37	452	0	370

DATE	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
NOV										
15...	44	85	62	.1	589	.05	.00	6	5	10
FEB										
22...	35	98	64	.3	608	.01	.00	--	--	--
AUG										
01...	72	95	66	1.0	658	.01	.00	7	6	4

DATE	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
NOV									
15...	0	2	0	2900	3	3	170	110	90
FEB									
22...	--	--	--	3300	--	--	160	--	--
AUG									
01...	<10	3	0	3200	1	0	190	40	10

394025084162800. Local number, MT-49.
LOCATION.--Lat 39°40'25", long 84°16'28", Hydrologic Unit 05080002, 1.2 mi (1.9 km) west of city hall in West Carrollton.
Owner: Metal Shredders, Inc.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in (0.15 m), depth 220 ft (67.1 m), cased.
DATUM.--Altitude of land-surface datum is 714.61 ft (217.813 m). (Levels by Miami Conservancy District.)
Measuring point: Floor of shelter 2.50 ft (0.762 m) above land-surface datum.
PERIOD OF RECORD.--November 1947 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 36.30 ft (11.064 m) Dec. 8, 1974; minimum daily low, 10.58 ft (3.225 m) Jan. 23, 1959.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 34.94 ft (10.650 m) Dec. 1; minimum daily low, 19.28 ft (5.877 m) Mar. 30.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33.43	34.23	34.94	27.82	26.38	26.48	19.33	19.83	20.63	21.58	22.88	23.16
2	33.37	34.23	34.83	27.82	26.34	26.47	19.37	19.93	20.71	21.49	22.90	23.12
3	33.41	34.30	34.67	27.77	26.33	26.46	19.50	19.98	20.52	21.67	22.83	23.15
4	33.39	34.33	34.48	27.73	26.31	26.53	19.55	19.96	20.47	21.44	22.71	23.20
5	33.39	34.23	34.46	27.77	26.23	26.54	19.64	20.13	20.82	21.65	22.51	23.30
6	33.42	34.18	34.29	27.74	26.22	26.58	19.55	19.95	20.89	21.72	22.46	23.59
7	33.40	34.38	34.15	27.64	26.21	26.61	19.69	19.86	20.88	21.76	22.79	23.70
8	33.25	34.47	34.02	27.50	26.19	26.58	19.41	20.10	20.92	21.57	22.87	23.75
9	33.22	34.48	33.94	27.41	26.19	26.58	19.39	20.29	21.03	21.57	22.92	23.58
10	33.38	34.55	33.88	27.33	26.20	26.59	19.56	20.39	20.81	21.90	22.98	23.57
11	33.43	34.57	33.83	27.25	26.18	26.57	19.70	20.40	20.79	21.99	23.00	23.87
12	33.47	34.46	33.89	27.15	26.21	26.56	19.72	20.40	21.09	22.05	22.78	23.99
13	33.54	34.42	33.93	27.03	26.17	26.49	19.86	20.06	21.20	22.05	22.76	24.06
14	33.59	34.62	33.78	26.99	26.28	26.10	19.93	19.97	21.25	22.14	23.06	24.12
15	33.46	34.67	33.33	27.02	26.30	25.28	19.71	20.17	21.23	21.94	23.10	24.14
16	33.44	34.73	32.71	26.99	26.27	23.41	19.74	20.14	21.29	21.96	23.18	23.94
17	33.62	34.76	32.17	26.92	26.30	22.31	20.03	20.15	21.13	22.31	23.22	23.77
18	33.69	34.81	31.61	26.97	26.25	21.72	20.05	20.18	21.12	22.39	23.24	23.81
19	33.78	34.69	31.10	26.91	26.26	21.26	20.04	20.24	21.37	22.45	23.06	24.06
20	33.83	34.60	30.53	26.88	26.30	21.03	19.98	20.15	21.40	22.52	23.06	24.10
21	33.86	34.79	30.10	26.92	26.34	20.67	19.87	20.05	21.43	22.59	23.32	24.18
22	33.72	34.82	29.68	26.91	26.37	20.45	19.63	20.25	21.49	22.59	23.43	24.30
23	33.71	34.84	29.35	26.87	26.34	20.10	19.48	20.28	21.54	22.41	23.50	24.10
24	33.94	34.71	29.09	26.79	26.36	19.94	19.76	20.31	21.33	22.60	23.52	24.05
25	33.98	34.82	28.83	26.72	26.41	19.75	19.62	20.21	21.31	22.63	23.59	24.34
26	34.04	34.74	28.60	26.68	26.45	19.61	19.33	20.24	21.56	22.66	23.52	24.37
27	34.07	34.70	28.39	26.69	26.45	19.40	19.61	20.00	21.68	22.74	23.41	24.45
28	34.11	34.81	28.28	26.60	26.41	19.37	19.72	19.91	21.74	22.81	23.64	24.56
29	33.99	34.90	28.16	26.54	---	19.33	19.49	19.94	21.74	22.65	23.65	24.60
30	33.94	34.92	28.03	26.49	---	19.28	19.44	20.34	21.78	22.57	23.46	24.62
31	34.17	---	27.95	26.42	---	19.36	---	20.58	---	22.77	23.31	---
MAX	34.17	34.92	34.94	27.82	26.45	26.61	20.05	20.58	21.78	22.81	23.65	24.62

WTR YR 1978 MEAN 25.58 HIGH 19.28 LOW 34.94

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
MAY											
31...	1100	1360	7.3	12.5	.2	380	56	89	38	110	6.0

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
MAY										
31...	394	0	323	32	110	150	.3	13	694	712

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
MAY										
31...	.00	.96	.24	1.2	1.2	5.3	.04	.01	1000	170

395753081593500. Local number, MU-10.
LOCATION.--Lat 39°57'53", long 81°59'35", Hydrologic Unit 05040004, on left bank of Muskingum River 0.2 mi (0.3 km) north of waterworks at Zanesville.
Owner: City of Zanesville.
AQUIFER.--Sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled public supply water-table well, diameter 18 in (0.46 m), depth 65 ft (19.8 m) cased.
PERIOD OF RECORD.--June 1967 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	FLOW RATE (GPM)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)
NOV												
09...	900	819	7.4	15	75	16	43	202	0	170	13	110
APR												
19...	--	852	7.5	10	78	19	37	226	0	190	11	130

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
NOV											
09...	84	453	.12	.00	.12	.57	.00	10	510	2	660
APR											
19...	77	556	.42	.01	.43	.47	.00	10	1500	2	600

395804081593200. Local number, MU-1A.
LOCATION.--Lat 39°58'04", long 81°59'32", Hydrologic Unit 05040004, 2.2 mi (3.5 km) northeast of the "Y" bridge in Zanesville.
Owner: Zanesville Water Department.
AQUIFER.--Sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in (0.15 m), depth 109 ft (33.2 m), cased.
DATUM.--Altitude of land-surface datum is 700 ft (213 m), from topographic map. Measuring point: Floor of instrument shelter 4.48 ft (1.366 m) above land-surface datum.
REMARKS.--Water level affected by nearby municipal wells and by stage of the Muskingum River. Prior to water year 1978, well depth reported as 132 ft (40.2 m).
PERIOD OF RECORD.--May 1942 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 37.25 ft (11.354 m) Aug. 1-2, 1954; minimum daily low, 8.50 ft (2.591 m) May 25, 1967.
EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 30.43 ft (9.275 m) Dec. 3; minimum daily low, 14.73 ft (4.490 m) Apr. 10.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.13	29.00	30.20	26.25	26.01	24.85	18.17	18.03	18.84	19.80	19.94	20.88
2	28.12	29.10	30.39	26.34	25.69	24.87	18.01	17.90	18.95	20.08	20.11	20.77
3	27.73	29.11	30.43	26.57	25.70	24.95	16.45	18.31	19.05	19.67	20.07	20.44
4	27.78	29.10	30.21	26.67	25.60	25.14	16.52	18.46	18.90	19.82	20.21	20.55
5	27.77	29.00	30.11	26.88	25.24	25.15	16.15	18.55	19.46	19.62	20.26	21.21
6	27.86	29.10	30.22	26.92	24.92	25.19	15.79	18.79	19.67	19.33	19.83	21.26
7	27.82	28.90	30.18	26.89	24.16	25.37	15.52	18.54	19.76	19.49	19.78	20.75
8	27.78	28.94	30.10	26.94	23.83	25.44	15.52	18.06	19.73	19.48	20.06	20.75
9	27.49	29.10	29.97	26.41	23.45	25.54	15.11	18.67	19.56	19.49	19.97	20.89
10	27.98	29.37	30.13	26.69	23.04	25.52	14.73	18.65	19.41	19.14	20.20	20.99
11	28.01	29.39	30.27	26.73	22.92	25.58	15.32	18.88	18.35	18.74	20.17	20.76
12	28.12	29.35	30.29	26.70	22.55	25.52	15.65	18.89	17.91	19.19	20.09	20.99
13	28.16	29.26	30.26	26.72	22.62	25.39	15.97	18.82	18.20	19.48	19.82	21.00
14	27.87	29.56	30.14	26.79	22.74	25.44	16.48	18.40	18.68	19.40	19.79	21.38
15	27.87	29.59	30.11	26.83	22.78	25.31	16.85	18.43	18.51	19.47	19.97	21.40
16	27.48	29.61	30.08	26.75	23.04	25.04	16.85	18.50	18.76	19.39	20.09	21.52
17	27.96	29.64	29.94	26.99	23.07	24.91	17.46	18.11	18.93	19.03	20.02	21.34
18	28.04	29.78	29.09	27.35	23.14	24.40	17.79	17.97	18.99	19.19	19.80	20.90
19	28.14	29.80	28.88	27.56	23.17	23.83	17.93	17.58	19.12	19.49	19.85	21.19
20	28.39	29.35	28.91	27.81	23.03	22.83	18.24	17.45	19.25	19.82	19.52	21.26
21	28.44	29.68	28.38	27.82	23.38	22.66	18.29	16.97	19.14	20.12	19.26	21.42
22	28.42	29.82	27.69	27.78	23.52	22.36	17.85	17.60	19.23	20.32	19.62	21.65
23	28.41	29.93	27.40	27.90	23.92	22.01	17.57	17.41	19.36	20.43	20.04	21.62
24	28.75	29.86	27.00	27.99	23.90	21.63	17.21	17.40	19.14	20.23	20.15	21.73
25	28.72	29.69	26.72	28.02	24.05	20.94	17.61	18.03	18.48	19.65	20.54	21.30
26	28.55	29.67	26.31	27.88	24.27	20.52	17.52	17.92	18.84	19.72	20.62	21.51
27	28.75	29.48	26.18	27.62	24.34	19.80	17.53	17.80	19.14	19.89	20.45	21.54
28	28.82	29.67	26.18	27.67	24.66	19.32	17.37	17.33	19.46	20.05	20.60	21.50
29	28.81	30.00	26.31	27.25	---	19.57	17.76	17.08	19.48	20.15	20.69	21.62
30	28.62	30.08	26.40	26.78	---	19.15	17.56	17.93	19.75	19.73	21.09	21.70
31	28.74	---	26.46	26.28	---	18.80	---	18.73	---	19.48	20.96	---
MAX	28.82	30.08	30.43	28.02	26.01	25.58	18.29	18.89	19.76	20.43	21.09	21.73

WTR YR 1978 MEAN 23.00 HIGH 14.73 LOW 30.43

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
JUN 27...	1430	710	7.3	8.5	.0	300	96	86	21	18	2.0

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
JUN 27...	250	0	205	20	84	40	.2	9.2	399	384	.31

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
JUN 27...	.15	.05	.20	.51	2.3	.04	.01	210	330	2.8

PICKAWAY COUNTY

393325082571100. Local number, PK-21.
LOCATION.--Lat 39°33'25", long 82°57'11", Hydrologic Unit 05060002, 3.0 mi (4.8 km) south of courthouse in Circleville.
Owner: Pittsburgh Plate Glass Company.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled industrial supply artesian well, diameter 20 in (0.51 m), depth 135 ft (41.1 m), cased below 85 ft (25.9 m).
PERIOD OF RECORD.--June 1967 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	FLOW RATE (GPM)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)
APR												
17...	1500	720	7.4	10	80	33	8.4	400	0	330	25	55

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
APR											
17...	17	450	.00	.00	.00	.20	.00	10	6200	0	40

393327082571600. Local number, PK-7.
LOCATION.--Lat 39°33'27", long 82°57'16", Hydrologic Unit 05060002, 3.1 mi (5.0 km) south of Circleville.
Owner: State of Ohio.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled test artesian well, diameter 6 in (0.15 m) depth drilled 172 ft (52.4 m), present depth 169 ft (51.5 m), cased to 164 ft (50.0 m).
DATUM.--Altitude of land-surface datum is 705 ft (215 m), from topographic map. Measuring point: Floor of instrument shelter, 3.00 ft (0.914 m) above land-surface datum.
PERIOD OF RECORD.--July 1972 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 54.80 ft (16.703 m) Sept. 15, 1977; minimum daily low, 44.65 ft (13.609 m) Aug. 22, 1975.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 54.68 ft (16.666 m) Dec. 10; minimum recorded daily low, 46.96 ft (14.313 m) July 10.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54.60	54.49	54.58	54.02	54.04	54.27	52.60	50.75	48.89	47.56	47.53	47.99
2	54.37	54.47	54.63	53.87	54.08	54.27	52.45	50.75	48.88	47.36	47.55	47.99
3	54.46	54.51	54.61	54.02	54.16	54.27	52.40	50.69	48.79	47.11	47.64	47.55
4	54.52	54.54	54.52	54.08	54.14	54.33	52.46	50.57	48.68	47.12	47.75	47.41
5	54.57	54.54	54.19	54.13	53.99	54.10	52.49	50.65	48.53	47.32	47.74	47.61
6	54.64	54.36	54.50	54.16	54.09	54.25	52.47	50.62	48.53	47.44	47.51	47.74
7	54.64	54.30	54.61	54.15	54.14	54.36	52.50	50.42	48.39	47.41	47.48	47.80
8	54.49	54.43	54.60	54.07	54.14	54.42	52.35	50.18	48.30	47.34	47.49	47.86
9	54.25	54.45	54.67	54.19	54.11	54.44	52.01	50.35	48.28	47.14	47.52	47.87
10	54.45	54.48	54.68	54.26	54.07	54.50	51.85	50.39	48.15	46.96	47.55	47.71
11	54.61	54.43	54.61	54.26	54.02	54.51	51.97	50.31	47.95	47.13	47.63	47.73
12	54.61	54.45	54.39	54.22	53.96	54.15	51.98	50.17	49.00	47.22	47.63	47.90
13	54.56	54.46	54.52	54.11	53.87	54.16	52.06	49.94	48.24	47.23	47.63	47.93
14	54.55	54.36	54.55	54.13	53.99	54.24	52.06	49.72	48.19	47.27	47.71	47.93
15	54.50	54.40	54.58	54.19	54.04	54.24	51.95	49.85	48.18	47.28	47.74	47.96
16	54.31	54.49	54.55	54.18	54.17	54.12	51.62	49.94	48.10	47.19	47.71	47.95
17	54.24	54.61	54.35	54.14	53.93	53.89	51.42	49.98	48.04	47.32	47.83	47.75
18	54.26	54.59	54.19	54.20	53.71	53.84	51.42	49.96	47.86	47.51	47.84	47.85
19	54.46	54.59	54.21	54.13	53.71	53.50	51.34	49.86	47.82	47.52	47.87	47.97
20	54.49	54.41	54.28	53.86	53.85	53.46	51.36	49.52	47.90	47.50	47.92	47.96
21	54.49	54.43	54.31	53.83	53.95	53.53	51.35	49.21	47.93	47.55	47.92	47.97
22	54.45	54.46	54.28	53.80	53.98	53.53	51.31	49.27	47.98	47.55	47.95	48.07
23	54.14	54.45	54.27	53.83	53.88	53.44	51.05	49.35	47.98	47.51	47.97	48.07
24	54.22	54.51	54.21	53.87	53.97	53.34	50.94	49.43	47.85	47.49	47.99	47.89
25	54.35	54.37	54.16	53.88	54.01	52.92	50.94	49.43	47.62	47.46	48.05	47.79
26	54.51	54.27	54.03	53.91	53.99	52.58	51.00	49.35	47.58	47.43	48.05	47.87
27	54.61	54.27	54.21	53.92	53.99	52.65	51.02	49.12	47.66	47.45	47.94	47.88
28	54.62	54.64	54.27	53.83	54.12	52.81	51.01	48.86	47.69	47.56	47.83	48.00
29	54.62	54.64	54.25	53.74	---	52.92	50.91	48.55	47.66	47.55	47.93	48.01
30	54.49	54.48	54.19	53.77	---	52.95	50.69	48.72	47.61	47.46	47.96	47.97
31	54.44	---	54.16	54.00	---	52.83	---	48.87	---	47.46	47.94	---
MAX	54.64	54.64	54.68	54.26	54.17	54.51	52.60	50.75	49.00	47.56	48.05	48.07

WTR YR 1978 MEAN 51.47 HIGH 46.96 LOW 54.68

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
JUN											
12...	1045	700	7.8	12.5	.2	310	0	74	31	15	1.8

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
JUN											
12...	440	0	361	11	2.5	4.8	.6	17	353	364	.02

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
JUN										
12...	.56	.08	.64	.66	2.9	.01	.01	0	10	2.5

PIKE COUNTY

390359083015100. Local number, PI-2.
LOCATION.--Lat 39°03'59", long 83°01'51", Hydrologic Unit 05060002, 1 mi (1.6 km) west of Piketon.
Owner: Goodyear Atomic Corporation.
AQUIFER.--Sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in (0.15 m), depth 60 ft (18.3 m), cased.
DATUM.--Altitude of land-surface datum is 550 ft (168 m), from topographic map. Measuring point: Floor of instrument shelter, 3.00 ft (0.914 m) above land-surface datum.
PERIOD OF RECORD.--September 1969 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 27.46 ft (8.370 m) Feb. 15, 1977; minimum daily low, 11.25 ft (3.429 m) Mar. 1, 1975.
EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 27.34 ft (8.333 m) Nov. 18-25; minimum daily low, 13.84 ft (4.218 m) Mar. 31.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.12	27.16	27.21	23.44	22.73	21.81	13.99	18.63	19.86	22.33	24.08	24.93
2	27.13	27.18	27.20	23.50	22.28	21.91	14.06	18.76	19.95	22.36	24.06	24.94
3	27.13	27.19	27.19	23.57	21.91	22.08	14.12	18.86	20.03	22.37	24.12	24.94
4	27.13	27.20	27.17	23.62	21.58	22.23	14.22	18.94	20.12	22.43	24.17	24.94
5	27.12	27.21	27.11	23.68	21.29	22.36	14.32	19.14	20.22	22.48	24.22	24.93
6	27.07	27.22	27.01	23.76	21.04	22.49	14.47	19.28	20.32	22.54	24.26	24.91
7	27.05	27.23	26.94	23.83	20.86	22.62	14.65	19.37	20.42	22.59	24.33	24.92
8	27.01	27.25	26.77	23.83	20.72	22.73	14.83	19.41	20.53	22.64	24.36	24.93
9	26.98	27.27	26.60	23.83	20.61	22.83	14.98	19.52	20.65	22.68	24.39	24.96
10	26.96	27.28	26.42	23.85	20.51	22.95	15.12	19.61	20.75	22.73	24.41	24.98
11	26.94	27.29	26.24	23.84	20.45	23.04	15.34	19.64	20.82	22.63	24.43	25.01
12	26.92	27.29	26.07	23.75	20.43	23.09	15.52	19.66	20.87	22.62	24.45	25.03
13	26.91	27.29	25.91	23.63	20.40	23.09	15.76	19.68	20.95	22.71	24.46	25.06
14	26.89	27.30	25.78	23.54	20.44	22.92	15.97	19.75	21.03	22.77	24.47	25.10
15	26.87	27.31	25.69	23.49	20.46	22.35	16.20	19.79	21.11	22.84	24.47	25.13
16	26.86	27.33	25.59	23.46	20.48	21.60	16.42	19.79	21.19	22.91	24.47	25.16
17	26.86	27.33	25.48	23.43	20.51	20.12	16.65	19.77	21.27	22.99	24.46	25.21
18	26.86	27.34	25.33	23.47	20.52	18.76	16.84	19.75	21.39	23.06	24.47	25.25
19	26.88	27.34	25.13	23.48	20.56	17.69	17.07	19.70	21.47	23.13	24.51	25.29
20	26.91	27.34	24.86	23.55	20.61	17.17	17.35	19.65	21.58	23.20	24.54	25.32
21	26.93	27.34	24.58	23.62	20.68	16.76	17.62	19.50	21.66	23.28	24.56	25.35
22	26.95	27.34	24.30	23.67	20.77	16.54	17.80	19.45	21.74	23.35	24.59	25.39
23	26.97	27.34	24.03	23.72	20.86	16.32	17.94	19.48	21.80	23.43	24.62	25.41
24	27.00	27.34	23.79	23.75	20.99	16.15	18.05	19.44	21.86	23.49	24.65	25.44
25	27.02	27.32	23.61	23.75	21.15	15.97	18.08	19.53	21.92	23.56	24.69	25.48
26	27.04	27.29	23.50	23.74	21.31	15.64	18.19	19.59	21.98	23.63	24.73	25.51
27	27.06	27.27	23.43	23.78	21.45	15.22	18.27	19.63	22.05	23.70	24.77	25.54
28	27.09	27.24	23.40	23.76	21.59	14.66	18.35	19.65	22.12	23.76	24.81	25.58
29	27.11	27.23	23.38	23.66	---	14.18	18.41	19.67	22.18	23.82	24.84	25.61
30	27.12	27.22	23.37	23.49	---	13.97	18.51	19.72	22.25	23.88	24.87	25.63
31	27.14	---	23.39	23.14	---	13.84	---	19.79	---	23.94	24.91	---
MAX	27.14	27.34	27.21	23.85	22.73	23.09	18.51	19.79	22.25	23.94	24.91	25.63

WTR YR 1978 MEAN 22.80 HIGH 13.84 LOW 27.34

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
MAY											
17...	1730	720	7.4	13.0	.0	350	40	89	30	10	1.7

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
MAY											
17...	373	0	306	24	74	13	.1	12	407	416	.00

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
MAY										
17...	.02	.07	.09	.09	.40	.00	.00	2300	340	4.9

411101081022000. Local number, PO-3.
LOCATION.--Lat 41°11'01", long 81°02'20", Hydrologic Unit 05030103, at Ravenna Army Ammunition Plant 10.9 mi (17.5 km) east of Ravenna.
Owner: U.S. Army.
AQUIFER.--Sandstone of Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in (0.30 m), depth 165 ft (50.3 m), cased.
DATUM.--Altitude of land-surface datum is 985 ft (300 m), from topographic map. Measuring point: Surface of instrument platform 2.80 ft (0.853 m) above land-surface datum.
REMARKS.--Water level affected by nearby pumping wells. Prior to water year 1978, well depth reported as 163 ft (49.7 m).
PERIOD OF RECORD.--May 1950 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 41.35 ft (12.603 m) Jan. 28, Feb. 6, 1954; minimum daily low, 19.34 ft (5.895 m) Mar. 31, 1976.
EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 25.01 ft (7.623 m) Nov. 14; minimum daily low, 19.98 ft (6.090 m) June 8.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.90	23.54	22.65	22.76	23.07	22.43	21.55	21.46	20.22	20.75	21.62	24.19
2	23.09	24.63	22.70	22.50	21.91	23.40	21.84	22.70	20.19	20.63	21.63	22.96
3	24.37	24.54	22.63	22.11	23.06	22.01	22.66	22.77	20.22	20.59	21.59	22.64
4	23.38	23.65	22.69	23.24	22.10	23.52	21.75	22.29	20.20	20.84	21.78	22.68
5	23.34	24.73	23.51	22.11	21.75	23.94	21.62	21.31	20.25	20.93	21.75	22.64
6	23.37	23.60	23.23	21.97	23.25	24.10	21.45	21.65	20.27	20.93	21.71	22.59
7	23.41	24.36	22.90	21.84	23.36	23.17	22.51	21.65	20.10	20.87	21.63	22.50
8	23.08	24.57	23.86	21.48	23.27	23.58	21.45	21.26	19.98	20.78	21.66	22.45
9	24.17	23.50	22.93	22.01	23.34	23.84	21.35	21.01	20.28	20.81	21.58	22.56
10	23.44	24.48	23.09	21.95	23.31	22.41	21.87	21.28	20.35	20.89	21.53	22.54
11	23.06	24.45	23.03	23.03	22.25	22.38	20.75	21.31	20.30	21.00	21.55	22.41
12	23.20	23.86	23.91	22.03	23.42	23.51	20.80	21.07	20.23	21.54	21.53	22.95
13	23.23	23.88	23.57	22.67	23.04	22.74	22.08	20.70	20.44	20.99	21.62	22.62
14	23.10	25.01	22.42	21.46	23.29	23.20	21.22	20.60	20.54	21.50	21.66	22.56
15	22.79	23.84	23.85	21.67	22.48	23.09	21.10	20.69	20.59	20.94	22.75	23.80
16	23.97	24.54	22.77	22.92	23.26	22.52	21.12	20.76	20.53	20.86	21.57	22.56
17	22.92	23.29	22.44	22.42	22.71	22.43	22.22	20.78	20.44	22.18	21.66	22.62
18	23.88	23.58	23.36	21.90	22.24	23.78	20.99	20.87	20.37	21.29	21.67	22.67
19	23.04	24.92	22.33	22.91	22.08	22.46	20.45	20.89	20.45	21.32	21.73	24.09
20	24.29	23.81	22.10	21.60	23.18	22.46	21.68	20.72	20.46	22.35	21.92	22.92
21	23.47	23.61	23.16	21.80	23.25	22.99	20.89	20.78	20.77	21.76	21.94	22.89
22	24.26	23.64	22.21	21.90	22.18	22.13	21.02	20.77	20.56	21.40	21.83	24.26
23	24.61	23.30	22.11	23.13	22.07	22.66	20.98	20.54	20.59	21.39	21.80	23.40
24	24.52	23.10	23.12	21.89	23.05	22.35	21.94	20.40	20.59	22.76	21.69	23.10
25	24.36	23.78	21.82	22.18	21.99	23.32	22.21	20.49	20.54	21.53	21.69	24.14
26	23.18	22.90	21.88	20.76	23.52	21.97	20.82	20.57	21.30	21.33	21.72	23.24
27	24.32	23.04	23.00	22.41	23.71	21.69	21.99	20.48	20.62	22.38	21.69	23.00
28	23.41	24.05	22.21	21.54	22.45	22.86	21.05	20.37	20.75	21.62	21.55	24.35
29	24.60	23.54	23.19	21.67	---	21.99	20.76	20.21	20.71	21.53	22.88	23.25
30	23.54	23.95	22.13	22.71	---	21.99	21.98	20.11	20.70	21.55	21.98	23.05
31	24.69	---	22.09	21.87	---	22.74	---	20.16	---	21.50	23.76	---
MAX	24.69	25.01	23.91	23.24	23.71	24.10	22.66	22.77	21.30	22.76	23.76	24.35

WTR YR 1978 MEAN 22.27 HIGH 19.98 LOW 25.01

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
JUN											
08...	1000	740	6.8	11.0	1.0	290	160	74	25	11	2.6

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
JUN											
08...	150	0	123	38	160	11	.2	12	448	390	.01

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
JUN										
08...	.08	.15	.23	.24	1.1	.68	.01	30	610	3.0

391922082580000. Local number, RO-3.
LOCATION.--Lat 39°19'22", long 82°58'00", Hydrologic Unit 05060003, 1.1 mi (1.8 km) southeast of courthouse in Chillicothe.
Owner: The Mead Corporation.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 30 in (0.76 m), depth 56.5 ft (17.2 m), cased.
DATUM.--Altitude of land-surface datum is 610 ft (186 m), from topographic map. Measuring point: Floor of instrument shelter 4.71 ft (1.436 m) above land-surface datum.
REMARKS.--Prior to water year 1978, well depth reported as 60 ft (18.3 m).
PERIOD OF RECORD.--January 1941 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 42.92 ft (13.082 m) Dec. 24, 1949; minimum daily low, 17.20 ft (5.243 m) Mar. 21, 1943.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 29.26 ft (8.918 m) Oct. 5; minimum daily low, 21.68 ft (6.608 m) May 14-15.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29.22	29.21	29.22	27.99	26.83	26.07	23.63	22.00	22.14	22.62	24.44	25.76
2	29.21	29.20	29.22	27.97	26.75	26.08	23.51	21.98	22.17	22.73	24.50	25.78
3	29.23	29.19	29.22	27.97	26.67	26.08	23.41	21.97	22.23	22.88	24.57	25.78
4	29.25	29.19	29.21	27.98	26.60	26.08	23.30	21.95	22.26	23.01	24.61	25.66
5	29.26	29.18	29.19	28.00	26.50	26.10	23.19	21.82	22.30	23.09	24.65	25.51
6	29.25	29.17	29.13	28.00	26.44	26.11	23.10	21.85	22.32	23.15	24.67	25.36
7	29.24	29.16	29.09	28.01	26.39	26.13	22.99	21.86	22.36	23.20	24.69	25.30
8	29.22	29.15	29.05	28.01	26.33	26.14	22.92	21.86	22.41	23.25	24.71	25.21
9	29.18	29.15	28.95	27.96	26.31	26.13	22.86	21.78	22.50	23.30	24.75	25.25
10	29.16	29.14	28.87	27.96	26.27	26.14	22.80	21.78	22.52	23.34	24.80	25.27
11	29.16	29.14	28.82	27.96	26.25	26.14	22.72	21.79	22.52	23.34	24.83	25.28
12	29.16	29.14	28.77	27.94	26.22	26.13	22.65	21.78	22.52	23.27	24.84	25.30
13	29.17	29.15	28.72	27.93	26.19	26.11	22.60	21.74	22.48	23.21	24.87	25.33
14	29.17	29.15	28.67	27.87	26.15	26.08	22.56	21.68	22.36	23.20	24.89	25.38
15	29.18	29.15	28.62	27.84	26.12	26.02	22.54	21.68	22.28	23.20	24.91	25.44
16	29.18	29.14	28.59	27.80	26.11	25.93	22.52	21.70	22.22	23.23	24.94	25.48
17	29.19	29.14	28.56	27.72	26.07	25.75	22.50	21.90	22.19	23.27	24.99	25.53
18	29.19	29.15	28.53	27.65	26.05	25.57	22.47	21.92	22.18	23.32	25.03	25.57
19	29.20	29.17	28.50	27.59	26.03	25.40	22.32	21.91	22.19	23.47	25.08	25.61
20	29.22	29.17	28.46	27.54	26.01	25.24	22.30	21.93	22.19	23.58	25.13	25.65
21	29.23	29.18	28.43	27.47	26.00	25.09	22.30	22.01	22.19	23.70	25.16	25.72
22	29.25	29.18	28.40	27.42	25.98	24.93	22.30	22.01	22.21	23.79	25.21	25.80
23	29.25	29.18	28.38	27.38	25.98	24.80	22.30	21.96	22.21	23.90	25.27	25.83
24	29.26	29.18	28.34	27.34	25.98	24.68	22.25	21.99	22.21	23.98	25.32	25.85
25	29.26	29.18	28.30	27.25	25.99	24.59	22.17	22.03	22.24	24.04	25.38	25.90
26	29.24	29.17	28.25	27.08	26.01	24.35	22.14	22.07	22.27	24.08	25.44	25.96
27	29.23	29.18	28.20	27.08	26.04	24.23	22.11	22.08	22.39	24.12	25.51	26.03
28	29.22	29.20	28.14	27.07	26.04	24.11	22.07	22.07	22.41	24.20	25.57	26.09
29	29.22	29.22	28.09	27.04	---	23.99	22.05	22.04	22.44	24.26	25.64	26.16
30	29.21	29.23	28.03	27.00	---	23.87	22.02	22.08	22.47	24.33	25.68	26.22
31	29.21	---	28.01	26.91	---	23.76	---	22.11	---	24.38	25.72	---
MAX	29.26	29.23	29.22	28.01	26.83	26.14	23.63	22.11	22.52	24.38	25.72	26.22

WTR YR 1978 MEAN 25.61 HIGH 21.68 LOW 29.26

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
MAY 17...	1200	130	6.3	13.5	.0	34	0	9.5	2.6	7.6	13

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
MAY 17...	74	1	62	.6	6.2	5.0	.0	.5	80	82	.02

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
MAY 17...	.01	.12	.13	.15	.66	.00	.00	260	20	6.3

384451082561900. Local number, SC-1.
LOCATION.--Lat 38°44'51", long 82°56'19", Hydrologic Unit 05090103, at the Detroit Steel Corporation plant in New Boston.
Owner: Detroit Steel Corporation.
AQUIFER.--Sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 26 in (0.66 m), depth 80 ft (24.4 m), cased.
DATUM.--Altitude of land-surface datum is 525 ft (160 m), from topographic map. Measuring point: Surface of instrument platform 6.00 ft (1.829 m) below land-surface datum.
REMARKS.--Water level affected by Ohio River stage.
PERIOD OF RECORD.--May 1955 to November 1961; October 1975 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 58.81 ft (17.93 m) Nov. 19, 1957; minimum daily low, 28.45 ft (8.672 m) May 13, 1958.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 50.46 ft (15.380 m) Sept. 30; minimum daily low, 29.98 ft (9.138 m) Mar. 31.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49.54	48.88	46.63	41.06	35.05	45.61	30.69	39.45	40.52	46.98	48.72	49.53
2	49.56	48.95	46.49	41.42	35.11	45.71	31.40	39.80	41.04	47.01	48.70	49.48
3	49.51	49.02	46.23	41.76	35.35	45.86	31.93	40.17	41.56	47.12	48.76	49.47
4	49.43	49.09	45.91	42.08	35.79	46.02	32.46	40.57	42.01	47.14	48.81	49.53
5	49.22	49.32	45.45	42.41	36.48	46.14	32.93	41.10	42.48	47.11	48.85	49.56
6	49.18	49.19	45.06	42.74	37.26	46.28	33.34	41.40	42.83	46.98	48.89	49.59
7	49.09	49.24	44.65	43.03	38.07	46.39	33.79	41.48	43.22	46.83	48.95	49.65
8	48.96	49.26	43.84	43.37	38.90	46.50	34.06	41.56	43.59	46.78	48.95	49.71
9	48.95	49.16	42.99	43.53	39.64	46.57	34.21	41.62	43.88	46.82	48.84	49.75
10	48.90	48.99	42.58	43.50	40.15	46.60	34.31	41.61	43.95	46.93	48.73	49.78
11	48.80	48.79	42.25	43.20	40.66	46.60	34.66	41.34	44.04	47.02	48.67	49.83
12	48.68	48.56	42.02	42.59	41.08	46.42	35.00	40.82	44.19	47.09	48.61	49.89
13	48.49	48.33	42.15	41.94	41.39	46.20	35.49	40.44	44.36	47.18	48.54	49.92
14	48.29	48.09	42.44	41.65	41.89	45.51	35.96	40.37	44.54	47.28	48.49	49.97
15	48.16	47.92	42.57	41.72	42.25	44.89	36.51	40.31	44.74	47.36	48.46	49.99
16	48.09	47.84	42.53	41.74	42.56	43.49	37.20	40.14	44.94	47.42	48.48	50.05
17	48.10	47.83	42.30	41.88	42.88	41.46	37.96	39.80	45.13	47.49	48.56	50.09
18	48.11	47.83	41.51	42.17	43.15	38.69	38.72	39.32	45.37	47.55	48.62	50.12
19	48.16	47.78	40.75	42.28	43.44	36.13	39.54	38.67	45.53	47.61	48.74	50.14
20	48.18	47.67	39.98	42.45	43.69	34.31	40.18	37.98	45.72	47.69	48.79	50.16
21	48.19	47.55	39.62	42.60	43.96	33.09	40.50	37.19	45.88	47.79	48.84	50.20
22	48.26	47.48	39.40	42.74	44.22	33.08	40.86	36.71	46.02	47.89	48.93	50.24
23	48.34	47.37	39.21	42.87	44.42	33.20	41.00	36.66	46.14	48.01	49.00	50.24
24	48.40	47.36	39.05	42.99	44.63	33.20	41.11	37.00	46.28	48.11	49.07	50.27
25	48.44	47.24	39.31	43.06	44.88	33.02	41.23	37.25	46.44	48.20	49.16	50.32
26	48.54	47.16	39.52	43.25	45.10	32.79	41.42	37.40	46.59	48.28	49.23	50.33
27	48.62	47.03	39.76	42.85	45.25	32.47	41.44	37.48	46.74	48.39	49.29	50.36
28	48.68	46.92	39.83	41.62	45.40	31.82	41.24	37.69	46.83	48.47	49.36	50.40
29	48.72	46.81	40.00	39.51	---	30.86	40.54	38.20	46.88	48.55	49.43	50.42
30	48.77	46.69	40.32	37.26	---	30.26	39.76	39.04	46.91	48.64	49.47	50.46
31	48.83	---	40.65	35.63	---	29.98	---	39.89	---	48.70	49.53	---
MAX	49.56	49.32	46.63	43.53	45.40	46.60	41.44	41.62	46.91	48.70	49.53	50.46

WTR YR 1978 MEAN 44.14 HIGH 29.98 LOW 50.46

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
MAY											
18...	1115	680	7.3	16.5	.0	260	120	72	19	25	3.5

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
MAY											
18...	164	0	135	13	130	47	.4	13	421	392	.27

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
MAY										
18...	.03	.08	.11	.38	1.7	.00	.00	1000	300	1.3

STARK COUNTY

405052081193700. Local number, ST-4.
LOCATION.--Lat 40°50'52", long 81°19'37", Hydrologic Unit 05040001, northeast of Canton on Harmont Avenue.
Owner: Adessi Brothers.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled test water-table well, diameter 4 in (0.10 m), depth 73 ft (22.3 m), cased.
DATUM.--Altitude of land-surface datum is 1,075 ft (328 m), from topographic map. Measuring point: Top of casing 4.00 ft (1.219 m) above land-surface datum.
REMARKS.--Prior to water year 1975 well depth reported as 190 ft (57.9 m).
PERIOD OF RECORD.--April 1941 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 23.49 ft (7.160 m) Sept. 22, 1978; minimum daily low, 6.93 ft (2.112 m) Feb. 6, 1952.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 23.49 ft (7.160 m) Sept. 22; minimum daily low, 10.04 ft (3.060 m) Apr. 1.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.15	13.11	13.00	10.85	11.06	11.66	10.04	10.82	---	12.05	12.53	12.55
2	13.15	13.13	12.97	10.89	11.06	11.68	10.07	---	---	12.08	12.56	12.56
3	13.14	13.15	12.92	10.93	11.07	11.72	10.10	---	---	12.08	12.58	12.58
4	13.13	13.17	12.86	10.95	11.08	11.74	10.12	---	---	12.08	12.60	12.60
5	13.12	13.19	12.83	10.98	11.09	11.77	10.13	---	---	12.09	12.61	12.61
6	13.12	13.20	12.78	11.01	11.11	11.80	10.14	---	---	21.10	12.61	12.65
7	13.02	13.21	12.65	11.04	11.13	11.82	10.15	---	---	12.32	12.51	12.69
8	13.02	13.22	12.53	11.05	11.15	11.84	10.16	---	11.90	12.24	12.43	12.73
9	13.02	13.23	12.43	11.05	11.17	11.86	10.17	---	11.90	12.24	12.42	12.76
10	13.01	13.23	12.35	11.05	11.19	11.88	10.18	---	11.86	12.24	12.42	12.79
11	12.98	13.24	12.31	11.04	11.20	11.90	10.20	---	11.81	12.27	12.00	12.81
12	12.96	13.24	12.26	11.04	11.22	11.91	10.22	---	11.77	12.30	11.77	12.84
13	12.94	13.24	12.24	11.03	11.24	11.91	10.24	---	11.76	12.32	11.88	12.87
14	12.93	13.24	12.22	11.03	11.25	11.87	10.29	---	11.77	12.32	11.96	12.89
15	12.93	13.24	12.10	11.04	11.29	11.71	10.32	---	11.78	12.19	12.03	12.89
16	12.93	13.24	11.64	11.05	11.33	11.28	10.35	---	11.81	12.07	12.07	12.87
17	12.93	13.24	11.18	11.06	11.35	10.92	10.38	---	11.83	12.16	12.12	12.90
18	12.93	13.23	10.91	11.07	11.37	10.71	10.41	---	11.85	12.20	12.17	12.93
19	12.93	13.20	10.75	11.10	11.40	10.61	10.43	---	11.86	12.24	12.21	12.94
20	12.95	13.16	10.68	11.11	11.42	10.51	10.44	---	11.87	12.31	12.24	12.96
21	12.96	13.14	10.64	11.12	11.44	10.44	10.44	---	11.88	12.31	12.26	12.99
22	12.97	13.11	10.63	11.14	11.47	10.41	10.44	---	11.89	12.36	12.30	23.49
23	12.98	13.09	10.63	11.15	11.51	10.38	10.44	---	11.91	12.37	12.32	13.38
24	12.99	13.06	10.64	11.17	11.53	10.36	10.44	---	11.93	12.36	12.35	13.12
25	13.00	13.04	10.66	11.17	11.56	10.36	10.45	---	11.95	12.27	12.39	13.14
26	13.01	13.02	10.69	11.17	11.58	10.36	10.48	---	11.96	12.31	12.41	13.17
27	13.02	13.01	10.72	11.16	11.61	10.34	10.55	---	11.98	12.38	12.44	13.20
28	13.04	13.01	10.74	11.14	11.64	10.24	10.63	---	12.01	12.41	12.44	13.24
29	13.05	13.00	10.77	11.13	---	10.14	10.72	---	12.03	12.44	12.48	13.29
30	13.08	13.00	10.80	11.10	---	10.09	10.81	---	12.04	12.45	12.50	13.31
31	13.10	---	10.83	11.08	---	10.05	---	---	---	12.47	12.53	---
MAX	13.15	13.24	13.00	11.17	11.64	11.91	10.81	10.82	12.04	21.10	12.61	23.49

WTR YR 1978 MEAN 11.97 HIGH 10.04 LOW 23.49

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
SEP											
22...	1330	795	7.1	12.0	.7	270	170	79	18	10	1.9

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
SEP											
22...	123	0	101	16	84	94	.1	3.9	458	366	.00

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
SEP										
22...	.01	.48	.49	.49	2.2	.04	.01	14000	270	3.1

403207081293800. Local number, TU-3.
LOCATION.--Lat 40°32'07", long 81°29'38", Hydrologic Unit 05040001, in the northwest part of Dover.
Owner: Dover City Water Department.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in (0.15 m), depth 62 ft (18.9 m), cased.
DATUM.--Altitude of land-surface datum is 880 ft (268 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.
PERIOD OF RECORD.--May 1960 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 19.35 ft (5.898 m) Nov. 29-30, Dec. 6-8, 1962; minimum daily low, 3.20 ft (0.975 m) July 15, 1969.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 10.01 ft (3.051 m) Sept. 28; minimum daily low, 5.12 ft (1.561 m) Apr. 1.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.81	8.97	8.97	6.81	6.55	8.72	5.12	7.06	7.34	7.88	9.06	9.52
2	8.37	8.99	8.66	6.90	6.79	8.74	5.23	7.12	7.35	7.76	9.10	9.47
3	8.35	9.01	8.28	7.25	7.03	8.78	5.20	7.19	7.42	7.72	9.15	9.41
4	8.09	9.08	7.99	7.06	7.09	8.89	5.21	7.19	7.31	7.65	9.23	9.48
5	8.21	9.10	8.18	7.14	7.15	8.92	5.49	7.24	7.50	7.80	9.22	9.64
6	8.30	9.08	7.82	7.23	7.25	8.99	5.51	7.28	7.60	7.84	---	9.68
7	8.35	9.10	7.24	7.14	7.37	8.81	5.62	7.26	7.60	7.88	---	9.73
8	8.31	9.18	7.08	7.13	7.45	9.09	5.53	7.31	7.59	7.87	---	9.79
9	8.20	9.16	7.43	7.30	7.52	9.11	5.59	7.33	7.45	7.83	---	9.88
10	8.08	9.19	7.52	7.33	7.54	9.15	5.78	7.33	7.30	8.00	---	9.86
11	8.25	9.17	7.58	7.36	7.63	9.10	5.79	7.40	7.32	8.06	---	9.90
12	8.25	9.12	7.47	7.35	7.67	8.97	5.79	7.38	7.45	8.10	---	9.92
13	8.22	9.13	7.51	7.38	7.71	8.75	5.79	7.31	7.52	8.16	---	9.85
14	7.99	9.21	7.37	7.42	7.83	8.36	6.37	7.16	7.57	8.16	---	9.84
15	8.25	9.18	6.69	7.52	7.91	8.36	6.46	7.10	7.64	8.18	---	9.71
16	8.25	9.29	6.46	7.61	7.97	8.36	6.47	7.10	7.72	8.18	---	9.67
17	8.35	9.23	6.33	7.57	8.05	8.36	6.59	6.86	7.77	8.27	---	9.56
18	8.37	9.15	6.20	7.66	8.07	7.64	6.63	6.97	7.80	8.43	---	9.66
19	8.44	9.11	6.29	7.69	8.14	7.43	6.55	6.68	7.78	8.51	---	9.70
20	8.50	9.04	6.23	7.71	8.20	7.60	6.68	6.63	7.68	8.61	---	9.74
21	8.55	9.18	6.24	7.82	8.27	7.71	6.72	6.72	7.72	8.78	---	9.82
22	8.57	9.15	6.27	7.74	8.33	7.68	6.64	6.83	7.80	8.74	---	9.86
23	8.61	9.08	6.10	7.74	8.36	7.24	6.52	6.90	7.87	8.78	---	9.87
24	8.66	9.07	6.42	---	8.43	6.82	6.68	6.97	7.96	8.69	---	9.87
25	8.67	9.04	6.58	---	8.49	6.40	6.72	7.00	7.99	8.74	---	9.93
26	8.69	9.07	6.66	---	8.56	6.16	6.76	7.06	8.00	8.74	---	9.95
27	8.75	9.06	6.58	---	8.40	5.97	6.79	7.10	8.04	8.83	---	9.97
28	8.83	9.24	6.61	---	8.66	5.84	6.89	7.11	7.96	8.86	9.61	10.01
29	8.87	9.25	6.71	---	---	5.66	6.74	7.18	7.97	8.93	9.65	9.97
30	8.85	9.14	6.76	6.49	---	5.52	6.77	7.28	8.06	8.87	9.65	10.00
31	8.96	---	6.79	6.68	---	5.36	---	7.31	---	8.99	9.56	---
MAX	8.96	9.29	8.97	7.82	8.66	9.15	6.89	7.40	8.06	8.99	9.65	10.01

WTR YR 1978 MEAN 7.92 HIGH 5.12 LOW 10.01

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
JUL 06...	1730	700	7.4	11.0	.0	310	140	86	23	15	2.7

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
JUL 06...	210	0	172	13	120	37	.0	11	411	398	1.0

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
JUL 06...	.00	.09	.09	1.1	4.8	.00	.00	0	10	.8

403210081293100. Local number, TU-10.
LOCATION.--Lat 40°32'10", long 81°29'31", Hydrologic Unit 05040C01, 1.8 mi (2.9 km) northwest of fairgrounds in Dover.
Owner: City of Dover.
AQUIFER.--Sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled public supply water-table well, diameter 20 in (0.51 m), depth 103 ft (31.4 m), screened below 85 ft (25.9 m).
PERIOD OF RECORD.--June 1967 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	FLOW RATE (GPM)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)
MAY												
31...	2100	581	7.5	9	73	19	4.4	216	0	180	11	120

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
MAY											
31...	7.3	416	.48	.00	.48	.01	.01	10	740	1	1300

401826083255200. Local number, U-4.
LOCATION.--Lat 40°18'26", long 83°25'52", Hydrologic Unit 05060001, 2.6 mi (4.2 km) southeast of Raymond. Owner: State of Ohio.
AQUIFER.--Limestone of Silurian Age .
WELL CHARACTERISTICS.--Drilled test artesian well, diameter 12 in (0.3 m), depth 350 ft (106.7 m), cased to 37 ft (11.3 m).
DATUM.--Altitude of land-surface datum is 1,040 ft (317 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.
PERIOD OF RECORD.--January 1973 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 24.38 ft (7.419 m) Sept. 11, 1977; minimum daily low, 19.32 ft (5.889 m) Feb. 24, 1975.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 24.11 ft (7.349 m) Oct. 1; minimum daily low, 20.31 ft (6.190 m) Mar. 27.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.11	23.77	22.94	22.28	21.79	22.60	21.01		---	22.46	23.02	23.32
2	23.91	23.79	22.95	22.38	21.78	22.59	21.22		---	22.36	23.05	23.30
3	23.90	23.77	23.00	22.52	21.87	22.45	21.14		---	22.17	22.89	23.26
4	23.92	23.84	23.04	22.55	21.96	22.61	21.13		---	22.21	22.79	23.33
5	23.92	23.82	22.80	22.54	21.96	22.61	21.23		---	22.28	22.82	23.35
6	23.96	23.74	22.97	22.52	21.95	22.67	21.18		---	22.28	22.80	23.38
7	23.94	23.64	23.01	22.52	22.01	22.68	20.93		---	22.30	22.77	23.37
8	23.66	23.71	22.94	22.35	22.11	22.62	21.09		---	22.31	22.82	23.39
9	23.59	23.67	23.12	22.13	22.11	22.57	21.14		---	22.33	22.80	23.43
10	23.63	23.67	23.14	22.21	22.08	22.50	21.08		---	22.39	22.81	23.45
11	23.60	23.77	23.11	22.25	22.14	22.51	21.21		---	22.45	22.83	23.46
12	23.69	23.88	22.99	22.27	22.16	22.57	21.29		---	22.48	22.84	23.46
13	23.69	23.84	22.90	22.19	22.11	22.55	21.49		---	22.43	22.91	23.51
14	23.64	23.78	22.34	22.24	22.23	21.97	21.64		22.27	22.48	22.98	23.50
15	23.61	23.65	21.29	22.42	22.30	20.73	21.67		22.29	22.48	22.96	23.55
16	23.64	23.61	21.37	22.47	22.31	20.49	21.72		22.28	22.54	22.91	23.50
17	23.64	23.58	21.36	22.43	22.35	20.74	21.73		22.31	22.63	23.00	23.56
18	23.56	23.70	21.38	22.57	22.32	20.89	21.60		22.31	22.71	23.01	23.61
19	23.72	23.77	21.47	22.53	22.33	20.88	20.99		22.23	22.75	23.07	23.64
20	23.75	23.66	21.45	22.47	22.36	20.80	20.77		22.19	22.77	23.20	23.67
21	23.79	23.76	21.59	22.65	22.40	20.46	20.90		22.19	22.82	23.24	23.69
22	23.81	23.72	21.80	22.68	22.42	20.34	21.03		22.27	22.83	23.16	23.79
23	23.82	23.60	21.87	22.66	22.38	20.62	21.04		22.29	22.84	23.17	23.82
24	23.81	23.62	21.83	22.59	22.38	20.78	21.08		22.30	22.85	23.16	23.75
25	23.76	23.49	21.65	22.39	22.46	20.85	21.11		22.29	22.80	23.17	23.77
26	23.71	23.65	21.82	21.80	22.55	20.60	21.12		22.27	22.77	23.20	23.79
27	23.74	23.59	22.03	21.81	22.56	20.31	21.19		22.34	22.79	23.21	23.74
28	23.79	23.81	22.09	21.81	22.51	20.47	---		22.42	22.90	23.15	23.82
29	23.80	23.77	22.14	21.81	---	20.82	---		22.43	22.85	23.23	23.82
30	23.77	23.58	22.24	21.80	---	20.83	---		22.46	22.92	23.27	23.83
31	23.78	---	22.29	21.80	---	20.81	---		---	22.93	23.26	---
MAX	24.11	23.88	23.14	22.68	22.56	22.68	21.73		22.46	22.93	23.27	23.83

WTR YR 1978 MEAN 22.62 HIGH 20.31 LOW 24.11

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
JUN											
12...	1325	1220	7.6	11.0	.2	610	330	150	58	23	3.1

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
JUN											
12...	342	0	281	14	400	6.3	1.4	13	888	823	.00

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
JUN										
12...	.35	.02	.37	.37	1.6	.01	.00	1	20	1.0

WARREN COUNTY

392511084172500. Local number, W-14.
LOCATION.--Lat 39°25'11", long 84°18'31", Hydrologic Unit 05090202, 3.3 mi (5.3 km) east of Monroe.
Owner: State of Ohio.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in (0.15 m), depth drilled 81 ft (24.7 m), present depth 73 ft (22.3 m) cased to 75 ft (22.9 m). depth drilled 81 ft (24.7 m), present depth 73 ft (22.3 m), cased to 75 ft (22.9 m).
DATUM.--Altitude of land-surface datum is 660 ft (201 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m), above land-surface datum.
PERIOD OF RECORD.--July 1975 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 16.48 ft (5.023 m) Sept. 29, 1977; minimum daily low, 6.43 ft (1.960 m) Feb. 19-20, 1976.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 16.35 ft (4.983 m) Oct. 1; minimum daily low, 7.72 ft (2.353 m) Mar. 18.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.35	14.15	12.56	11.03	9.00	11.55	9.29	9.95	10.50	11.53	12.21	9.57
2	15.45	14.19	12.24	11.12	8.99	11.52	9.35	10.03	10.78	11.51	12.21	9.25
3	14.76	14.22	12.11	11.25	9.03	11.59	9.44	10.08	10.83	10.90	12.25	9.02
4	14.67	14.29	12.03	11.30	9.09	11.69	9.50	10.00	10.89	10.43	12.27	8.89
5	14.63	14.28	11.89	11.33	9.09	11.67	9.52	10.19	11.10	10.49	12.29	9.16
6	14.64	14.21	11.33	11.32	9.51	11.75	9.59	10.23	11.16	10.76	12.24	9.41
7	14.61	14.25	11.36	11.32	9.63	11.73	9.69	10.17	11.06	10.89	12.16	9.68
8	14.52	14.31	11.35	11.25	9.75	11.73	9.76	10.03	10.98	11.09	12.18	9.89
9	14.43	14.30	11.63	10.50	9.85	11.71	9.75	9.90	10.84	11.16	12.21	10.12
10	14.35	14.32	11.62	10.68	9.99	11.69	9.75	9.79	10.77	11.31	12.22	10.29
11	14.30	14.43	11.55	10.79	10.15	11.62	9.89	9.75	10.78	11.46	12.10	10.47
12	14.32	14.51	11.53	10.80	10.27	11.09	9.98	9.98	10.89	11.60	11.98	10.70
13	14.31	14.47	11.51	10.82	10.34	10.26	10.06	9.65	10.93	11.70	11.99	10.79
14	14.30	14.36	11.15	10.91	10.58	9.16	10.06	8.84	10.93	11.72	12.10	10.86
15	14.35	14.36	10.18	11.03	10.69	8.25	10.19	8.51	10.95	11.70	12.16	10.97
16	14.41	14.37	9.85	11.06	10.74	7.81	10.26	8.59	11.07	11.69	12.22	11.04
17	14.41	14.38	9.67	11.08	10.73	7.74	10.23	8.66	11.15	11.91	12.36	11.14
18	14.49	14.33	9.71	11.16	10.73	7.72	10.11	8.76	11.24	12.02	12.35	11.30
19	14.61	14.31	9.78	11.13	10.73	7.84	10.08	8.89	11.18	12.19	12.50	11.35
20	14.65	14.19	9.98	11.18	11.01	7.88	10.08	9.02	11.17	12.29	12.53	11.52
21	14.67	14.11	10.19	11.34	11.10	8.03	10.10	9.16	11.15	12.43	12.52	11.64
22	14.73	13.84	10.38	11.34	11.12	8.27	10.08	9.44	11.13	12.49	12.55	11.76
23	14.75	13.47	10.47	11.33	11.18	8.56	10.02	9.50	11.16	12.58	12.56	11.80
24	14.80	13.29	10.41	11.31	11.18	8.69	9.96	9.74	11.21	12.49	12.56	11.84
25	14.77	13.19	10.52	11.11	11.35	8.61	9.90	9.83	11.23	12.37	12.56	11.98
26	14.69	13.23	10.61	10.69	11.40	8.35	9.65	9.91	11.09	12.26	12.76	12.03
27	14.45	13.20	10.85	10.12	11.42	8.60	9.74	10.01	11.11	12.27	12.73	12.16
28	14.18	13.44	10.87	9.67	11.41	8.73	9.77	10.04	11.23	12.22	12.60	12.23
29	14.11	13.39	10.94	9.44	---	8.94	9.80	10.13	11.32	12.19	12.36	12.21
30	14.06	13.27	11.02	9.26	---	8.98	9.82	10.34	11.43	12.19	11.65	12.20
31	14.11	---	11.03	9.10	---	9.02	---	10.54	---	12.22	10.35	---
MAX	16.35	14.51	12.56	11.34	11.42	11.75	10.26	10.54	11.43	12.58	12.76	12.23

WTR YR 1978 MEAN 11.33 HIGH 7.72 LOW 16.35

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
MAY											
22...	1530	725	7.5	13.5	.0	310	0	72	31	19	2.4

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
MAY											
22...	396	0	325	28	1.4	40	.4	15	393	378	.00

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
MAY										
22...	.59	.06	.65	.65	2.9	.09	.00	2000	30	2.2

392458081271100. Local number, WA-1.
LOCATION.--Lat 39°24'58", long 81°27'11", Hydrologic Unit 05040004, at Third and Putnam Streets, Marietta.
Owner: City of Marietta.
AQUIFER.--Sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in (0.15 m), depth 63 ft (19.2 m), cased.
DATUM.--Altitude of land-surface datum is 610 ft (186 m), from topographic map. Measuring point: Floor of instrument shelter 4.80 ft (1.463 m) above land-surface datum.
REMARKS.--Prior to water year 1978, well depth reported as 42 ft (12.8 m).
PERIOD OF RECORD.--May 1942 to June 1974, May 1975 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 30.70 ft (9.357 m) Sept. 9, 1962; minimum daily low, 18.83 ft (5.739 m) Mar. 25, 1945.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 27.44 ft (8.364 m) Sept. 30; minimum daily low, 22.02 ft (6.712 m) Apr. 9-10.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.93	26.99	---	24.67	23.86	25.53	22.46	24.53	24.44	25.83	26.49	27.09
2	26.91	27.05	---	24.79	23.69	25.52	22.50	24.61	24.64	25.87	26.49	27.00
3	26.85	27.06	---	24.84	23.77	25.62	22.48	24.73	24.72	25.85	26.57	27.00
4	26.78	27.05	---	24.93	23.83	25.71	22.41	24.81	24.83	25.67	26.58	27.06
5	26.77	27.06	---	25.07	23.94	25.75	22.45	24.88	24.91	25.45	26.61	27.14
6	26.71	27.06	---	25.09	23.98	25.80	22.31	24.90	25.06	25.50	26.62	27.13
7	26.71	27.12	---	25.18	24.00	25.81	22.23	24.95	25.08	25.56	26.62	27.17
8	26.71	27.14	---	25.19	23.98	25.83	22.03	24.98	25.11	25.63	26.55	27.21
9	26.74	27.09	---	25.02	23.99	25.85	22.02	24.98	24.93	25.71	26.65	27.26
10	26.71	26.98	---	24.67	24.09	25.88	22.02	24.92	24.96	25.81	26.67	27.31
11	26.58	26.98	---	24.41	24.19	25.86	22.19	24.84	25.01	25.80	26.59	27.36
12	26.45	26.96	---	24.46	24.25	25.76	22.24	24.82	25.09	25.82	26.57	27.34
13	26.41	26.98	---	24.49	24.34	25.63	22.49	24.86	25.14	25.91	26.61	27.35
14	26.42	26.94	---	24.56	24.54	25.27	22.65	24.84	25.21	25.96	26.64	27.37
15	26.48	26.96	---	24.69	24.62	24.70	22.86	24.74	25.30	25.90	26.69	27.38
16	26.52	26.95	---	24.75	24.68	23.88	23.09	24.58	25.41	26.00	26.71	27.38
17	26.58	26.97	---	24.84	24.78	23.58	23.33	24.38	25.43	26.02	26.75	27.31
18	26.60	26.95	---	24.91	24.78	23.64	23.53	24.10	25.52	26.09	26.79	27.39
19	26.57	26.85	---	24.85	24.90	23.63	23.58	23.38	25.54	26.13	26.80	27.43
20	26.63	26.71	---	24.89	25.04	23.61	23.61	23.12	25.51	26.16	26.84	27.38
21	26.64	26.68	---	25.01	25.09	23.56	23.55	23.18	25.57	26.23	26.86	27.37
22	26.72	26.69	---	25.04	25.13	23.51	23.54	23.22	25.64	26.28	26.90	27.36
23	26.74	26.61	---	25.11	25.22	23.38	23.52	23.32	25.69	26.34	26.93	27.35
24	26.77	26.58	---	25.12	25.26	23.05	23.61	23.42	25.73	26.35	26.95	27.33
25	26.79	26.55	---	25.10	25.28	22.93	23.67	23.37	25.80	26.37	26.96	27.34
26	26.84	26.59	---	24.85	25.32	22.61	23.78	23.21	25.83	26.39	27.03	27.31
27	26.86	26.59	---	24.06	25.42	22.36	23.89	23.33	25.82	26.42	27.07	27.33
28	26.89	26.60	---	23.24	25.44	22.35	24.01	23.62	25.82	26.45	27.07	27.38
29	26.94	26.57	24.43	23.70	---	22.41	24.17	23.95	25.73	26.46	27.12	27.39
30	26.96	---	24.51	23.76	---	22.41	24.33	24.14	25.74	26.48	27.12	27.44
31	26.95	---	24.57	23.86	---	22.32	---	24.22	---	26.49	27.10	---
MAX	26.96	27.14	24.57	25.19	25.44	25.88	24.33	24.98	25.83	26.49	27.12	27.44

WTR YR 1978 MEAN 25.43 HIGH 22.02 LOW 27.44

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
JUN 27...	1945	1100	7.2	15.0	.0	430	130	140	31	27	1.3

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
JUN 27...	420	0	344	42	96	68	.2	14	611	591	.00

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
JUN 27...	.65	.01	.66	.65	2.9	.01	.01	330	4400	1.5

WASHINGTON COUNTY--Continued

392556081281500. Local number WA-10.
LOCATION.--Lat 39°25'56", long 81°28'15", Hydrologic Unit 05040004, on left bank of Muskingum River 0.2 mi (0.3 km) north of fairgrounds in Marietta.
Owner: City of Marietta.
AQUIFER.--Sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled public supply water-table well, diameter 17 in (0.43 m), depth 56 ft (17.1 m), screened below 34 ft (10.4 m).
PERIOD OF RECORD.--June 1973 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	FLOW RATE (GPM)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)
NOV												
09...	1000	773	7.2	20	72	19	60	188	0	150	19	120
APR												
19...	1000	668	7.3	10	57	15	30	166	0	140	13	110

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
NOV											
09...	72	505	.06	.00	.06	.09	.01	<10	0	4	800
APR											
19...	53	423	.40	.01	.41	.04	.00	10	80	2	620

The following table contains water level measurements and chemical analyses from observation wells located in five small watersheds associated with different coal seams. The data will be used to document ground-water flow and water quality during pre- and post- mining conditions.

COSHOCTON COUNTY

400944081444700. Local number, C06 W10-3.
LOCATION.--Lat 40°09'44", long 81°44'47", Hydrologic Unit 05040005, near Plainfield.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 62 ft (18.9 m), cased to 19 ft (5.8 m), open end.
DATUM.--Altitude of land-surface datum is 820.47 ft (250.079 m). Measuring point: Top of casing, 2.0 ft (0.61 m) above land-surface datum.
PERIOD OF RECORD.--July 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 13.60 ft (4.145 m) below land-surface datum, July 8, 1978; lowest, 18.16 ft (5.535 m) below land-surface datum, Oct. 29, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.22	17.91	16.04	15.88	14.82		---	14.75	14.52	---	14.69	14.40
10	17.14	17.42	16.16	15.45	14.97		---	14.38	13.95	13.73	14.17	14.22
15	16.98	17.30	15.42	15.32	15.31		---	13.92	---	14.15	14.49	14.39
20	17.35	17.06	15.27	15.20	15.25		---	14.00	---	14.26	14.78	14.13
25	17.53	16.57	15.42	14.95	---		---	14.15	---	14.32	14.59	14.36
EOM	17.84	16.61	15.75	14.86	---		14.41	14.33	---	14.43	14.46	14.33
MAX	18.16	17.97	16.26	15.96	15.39		14.41	14.95	14.54	14.51	14.78	14.48

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT
DEC 27...	1330	290	6.9	11.0	31	.0	--	--	--	--	4.0	0
JUL 06...	--	246	7.7	13.5	1	.0	120	0	26	14	3.5	5

DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
DEC 27...	--	.7	140	0	115	28	16	1.1	.3	.03	.01
JUL 06...	.1	.8	152	0	125	4.9	17	1.5	.2	--	--

DATE	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ANTIMONY, TOTAL (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)
DEC 27...	20	--	1	2	--	100	--	0	--	20	--
JUL 06...	--	20	--	--	0	--	0	--	0	--	0

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)
DEC 27...	8	--	10000	20	8	--	110	60	<.5	<.5	8
JUL 06...	--	0	10000	150	--	5	80	30	--	.5	--

DATE	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
DEC 27...	--	0	--	0	0	40	--	60	50	.00	9
JUL 06...	0	--	0	--	0	--	50	--	10	.00	4

COSHOCTON COUNTY--Continued

402156081491300. Local number, A06 W10-3.
LOCATION.--Lat 40°21'56", long 81°48'13", Hydrologic Unit 05040003, near Coshocton.
AQUIFER.--Shale-coal shales of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 66 ft (20.1 m), cased to 20 ft (6.1 m), open end.
DATUM.--Altitude of land-surface datum is 1011.87 ft (308.418 m). Measuring point: Top of casing, 2.58 ft (0.786 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
APR 05...	1515	1190	7.5	17.0	5	.0	520	200	130	47	220

DATE	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
APR 05...	47	4.2	16	397	0	326	20	690	5.5	.2

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ANTIMONY, DISSOLVED (UG/L AS SB)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
APR 05...	30	0	0	200	0	1	1	9000	2300	10

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
APR 05...	140	100	<.5	0	0	0	3700	20	.00	9

COSHOCTON COUNTY--Continued

402201081481200. Local number, ABS Watershed 172 Spring.
LOCATION.--Lat 40°22'01", long 81°48'12", Hydrologic Unit 05040003, near Coshocton.
AQUIFER.--Sand, shales and coals of Pennsylvanian Age.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
APR 04...	1450	375	6.8	9.5	5	.0	130	25	37	9.8	20

DATE	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
APR 04...	24	.8	2.4	132	0	108	33	52	8.8	.2

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ANTIMONY, DISSOLVED (UG/L AS SB)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
APR 04...	30	0	0	0	0	1	1	90	60	11

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
APR 04...	10	10	<.5	0	0	0	200	10	.00	2

COSHOCTON COUNTY--Continued

402208081481001. Local number, A06 W6-2.
LOCATION.--Lat 40°22'08", long 81°48'10", Hydrologic Unit 05040003, near Coshocton.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 98 ft (29.9 m), cased to 18.7 ft (5.7 m), open end.
DATUM.--Altitude of land-surface datum is 1136.32 ft (346.350 m). Measuring point: Top of casing, 2.3 ft (0.70 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
APR 05...	1400	360	6.2	12.0	5	.3	120	20	27	12	11

DATE	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
APR 05...	16	.4	3.6	118	0	97	119	73	2.9	.2

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ANTIMONY, DISSOLVED (UG/L AS SB)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
APR 05...	30	0	0	0	0	0	1	20000	12000	14

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
APR 05...	590	480	<.5	12	0	0	140	30	.00	2

COSHOCTON COUNTY--Continued

402208081481200. Local number, A06 W157.
LOCATION.--Lat 40°22'08", long 81°49'12", Hydrologic Unit 05040003, near Coshocton.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Hand-dug well, diameter 3 ft (0.9 m), depth 13.9 ft (4.2 m).
DATUM.--Altitude of land-surface datum is 1115.45 ft (339.989 m).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
APR											
05...	1315	390	6.1	.0	5	.0	150	120	36	17	7.3

DATE	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
APR										
05...	9	.3	3.2	53	0	43	67	120	3.1	.2

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ANTIMONY, DISSOLVED (UG/L AS SB)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
APR										
05...	40	0	0	0	0	1	3	290	70	4

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
APR										
05...	40	40	<.5	8	0	0	170	70	.00	0

COSHOCTON COUNTY--Continued

402208081481300. Local number, A06 W11-2.
LOCATION.--Lat 40°22'08", long 81°48'13", Hydrologic Unit 05040003, near Coshocton.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 56 ft (17.1 m), cased to 18.4 ft (5.6 m), open end.
DATUM.--Altitude of land-surface datum is 1092.35 ft (332.948 m). Measuring point: Top of casing, 1.6 ft (0.49 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
APR											
05...	1200	730	7.0	11.0	5	.0	320	55	98	19	21

DATE	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
APR										
05...	12	.5	3.4	327	0	268	52	130	1.9	.2

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ANTIMONY, DISSOLVED (UG/L AS SB)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
APR										
05...	30	0	0	200	4	1	0	>000	1600	23

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
APR										
05...	490	440	<.5	0	0	0	390	20	.00	10

COSHOCTON COUNTY--Continued

402210081480700. Local number, A06 W3-1.
LOCATION.--Lat 40°22'10", long 81°48'07", Hydrologic Unit 05040003, near Coshocton.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in (0.15 m), depth 75 ft (22.9 m), cased to 18.5 ft (5.6 m), open end.
DATUM.--Altitude of land-surface datum is 1206.26 ft (367.688 m). Measuring point: Top of casing, 1.5 ft (0.46 m) above land-surface datum.
REMARKS.--Water-level data collected November 1976 to June 1977.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
APR											
05...	1700	440	7.2	11.5	5	.0	200	35	52	18	7.7

DATE	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
APR										
05...	8	.2	2.0	206	0	169	21	56	3.8	.2

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ANTIMONY, DISSOLVED (UG/L AS SB)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
APR										
05...	30	0	0	0	0	4	0	4400	150	6

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
APR										
05...	600	140	<.5	2	0	0	200	10	.00	9

COSHOCTON COUNTY--Continued

402210081490701. Local number, A06 W4-2.
LOCATION.--Lat 40°22'10", long 81°48'07", Hydrologic Unit 05040003, near Coshocton.
AQUIFER.--Shales and sands of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 170 ft (51.8 m) cased to 78.9 ft (24.0 m), open end. After Oct. 18, 1976, 4 in (0.10 m) slotted casing to bottom of well.
DATUM.--Altitude of land-surface datum is 1206.07 ft (367.610 m). Measuring point: Top of casing, 2.1 ft (0.64 m) above land-surface datum.
REMARKS.--Well redrilled Oct. 18, 1976 after cave-in. Water-level data collected November 1976 to June 1977.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
APR 05...	1730	580	7.0	11.0	5	.3	180	0	43	17	37

DATE	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
APR 05...	30	1.2	5.5	243	0	199	39	92	9.2	.2

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ANTIMONY, DISSOLVED (UG/L AS SB)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
APR 05...	0	0	8	0	1	2	0	21000	12000	15

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
APR 05...	170	140	<.5	7	0	0	640	20	.00	7

COSHOCTON COUNTY--Continued

402210081481600. Local number, A06 W7-1.
LOCATION.--Lat 40°22'10", long 81°48'16", Hydrologic Unit 05040003, near Coshocton.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 12 ft (3.6 m), cased to 9.7 ft (3.0 m), open end.
DATUM.--Altitude of land-surface datum is 1138.28 ft (346.948 m). Measuring point: Top of casing, 2.3 ft (0.70 m) above land-surface datum.
PERIOD OF RECORD.--June 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.02 ft (0.006 m) below land-surface datum, Jan. 29, 1978; lowest, 10.35 ft (3.155 m) below land-surface datum, Nov. 7-8, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.97	10.33	---	3.04	.76		---	1.28		---	7.84	8.61
10	8.64	9.75	---	.38	2.34		---	.65		---	7.28	9.18
15	8.61	8.63	---	.38	3.84		---	.12		---	7.96	9.47
20	9.56	8.63	.65	.82	4.62		---	.06		5.64	8.49	8.79
25	9.85	---	.58	1.79	---		---	.27		6.56	8.92	9.46
EOM	10.12	---	1.62	.10	---		.45	1.71		7.20	9.30	9.81
MAX	10.12	10.35	1.62	3.39	4.78		.45	1.71		7.20	9.37	9.81

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
APR											
05...	0830	300	7.0	7.0	20	.3	94	0	22	7.1	4.1

DATE	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
APR										
05...	4	.2	2.1	104	0	85	17	54	6.1	.1

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ANTIMONY, DISSOLVED (UG/L AS SB)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
APR										
05...	0	0	0	100	0	0	1	25000	17000	7

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
APR										
05...	650	650	<.5	7	0	0	90	20	.00	4

COSHOCTON COUNTY--Continued

402210081481601. Local number, AD6 WB-2.
LOCATION.--Lat 40°22'10", long 81°48'16", Hydrologic Unit 05040003, near Coshocton.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 101 ft (30.8 m), cased to 18.6 ft (5.7 m), open end.
DATUM.--Altitude of land-surface datum is 1138.64 ft (347.057 m). Measuring point: Top of casing, 1.4 ft (0.43 m) above land-surface datum.
PERIOD OF RECORD.--June 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 28.00 ft (8.534 m) below land-surface datum, May 30, 1978; lowest, 33.19 ft (10.116 m) below land-surface datum, Nov. 21, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	32.05	32.18	32.04	30.85	30.55	30.71	---	28.72	28.37	29.52	30.28	
10	32.04	32.22	31.96	30.89	30.52	31.00	29.76	28.76	28.67	29.41	30.35	
15	32.03	32.42	31.59	30.72	30.55	30.87	29.73	28.37	28.91	29.39	30.56	
20	32.04	33.08	31.32	30.58	30.51	30.97	29.28	28.42	28.97	29.64	30.79	
25	32.08	32.50	31.19	30.41	30.61	31.02	29.35	28.24	29.18	29.77	30.87	
EOM	32.15	32.19	30.99	30.64	30.69	31.21	28.75	28.08	29.38	29.99	31.04	
MAX	32.15	33.19	32.15	30.93	30.74	31.22	31.26	28.94	29.38	29.99	31.04	

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
APR 05...	545	5.8	11.0	5	.3	200	120	48	20	6.4

DATE	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
APR 05...	6	.2	4.0	103	0	84	261	180	1.7	.3

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ANTIMONY, DISSOLVED (UG/L AS SB)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
APR 05...	10	0	42	0	0	1	1	26000	16000	4

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
APR 05...	1200	1200	<.5	120	0	0	210	150	.00	1

COSHOCTON COUNTY--Continued

402210081481602. Local number, A06 W9-3.
LOCATION.--Lat 40°22'10", long 81°48'16", Hydrologic Unit 05040003, near Coshocton.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 183 ft (55.8 m), cased to 114.5 ft (34.9 m), open end. After Oct. 18, 1976, 4 in (0.10 m) slotted casing to bottom of well.
DATUM.--Altitude of land-surface datum is 1138.35 ft (346.969 m). Measuring point: Top of casing, 1.5 ft (0.46 m) above land-surface datum.
REMARKS.--Well redrilled October 18, 1976 after cave-in.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
APR 05...	0930	1180	9.2	13.0	5	.3	6	0	1.5	.6	410

DATE	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
APR 05...	94	72	2.9	800	181	958	1.2	4.9	30	4.5

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ANTIMONY, DISSOLVED (UG/L AS SB)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
APR 05...	30	0	1	100	0	0	1	3300	50	5

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
APR 05...	20	0	<.5	0	0	0	90	0	.00	7

COSHOCTON COUNTY--Continued

402213081481700. Local number, A06 W1-1.
LOCATION.--Lat 40°22'13", long 81°48'17", Hydrologic Unit 05040003, near Coshocton.
AQUIFER.--Shales of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 90 ft (27.4 m) cased to 18.8 ft (5.7 m), open end.
DATUM.--Altitude of land-surface datum is 1207.84 ft (368.150 m). Measuring point: Top of casing, 1.2 ft (0.37 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
APR 04...	1230	325	6.8	12.5	20	.0	140	49	37	11	3.3

DATE	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
APR 04...	5	.1	3.2	108	0	89	27	53	2.6	.1

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ANTIMONY, DISSOLVED (UG/L AS SB)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
APR 04...	40	1	0	0	0	1	5	1200	70	7

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
APR 04...	40	10	<.5	1	1	0	110	20	.00	5

GROUND-WATER RECORDS IN STRIP MINES

COSHOCTON COUNTY--Continued

402213081481701. Local number, A06 W2-2.
LOCATION.--Lat 40°22'13", long 81°48'17", Hydrologic Unit 05040003, near Coshocton.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 169 ft (51.5 m), cased to 98.8 ft (30.1 m), open end.
DATUM.--Altitude of land-surface datum is 1207.29 ft (367.982 m). Measuring point: Top of casing, 2.2 ft (0.67 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
APR 04...	1345	1105	7.1	12.5	5	.0	370	60	89	35	80

DATE	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
APR 04...	31	1.8	11	377	0	309	48	290	6.1	.3

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ANTIMONY, DISSOLVED (UG/L AS SB)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
APR 04...	30	0	0	100	0	0	0	3600	250	5

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
APR 04...	480	470	<.5	2	0	0	2300	20	.00	11

JEFFERSON COUNTY

401002080521800. Local number, J11 W4-1.
LOCATION.--Lat 40°10'02", long 80°52'18", Hydrologic Unit 05030101, near Harrisville.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 60 ft (18.3 m), cased to 18.80 ft (5.73 m), open end.
DATUM.--Altitude of land-surface datum is 1251.37 ft (381.418 m). Measuring point: Top of casing, 1.2 ft (0.37 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
MAR 28...	1330	525	7.0	13.0	5	.0	220	110	68

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)
MAR 28...	13	11	10	.3	1.4	144	0	118	23

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	PHENOLS (UG/L)
MAR 28...	68	43	.1	1300	90	30	10	29

JEFFERSON COUNTY--Continued

401004080521900. Local number, J11 W6-1.
LOCATION.--Lat 40°10'04", long 80°52'19", Hydrologic Unit 05030101, near Harrisville.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 46 ft (14.0 m), cased to 17.8 ft (5.4 m), open end.
DATUM.--Altitude of land-surface datum is 1237.36 ft (377.147 m). Measuring point: Top of casing, 3.2 ft (0.98 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
MAR 28...	1430	520	6.8	14.5	10	.0	240	190	73

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	PHENOLS (UG/L)
MAR 28...	170	9.8	.2	450	0	340	70	1

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)
MAR 28...	15	6.7	6	.2	1.6	58	0	56	17

JEFFERSON COUNTY--Continued

401004080521901. Local number, J11 W7-2.
LOCATION.--Lat 40°10'04", long 80°52'19", Hydrologic Unit 05030101, near Harrisville.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 192 ft (58.5 m), cased to 53.8 ft (16.4 m), open end.
DATUM.--Altitude of land-surface datum is 1237.25 ft (377.114 m). Measuring point: Top of casing, 3.0 ft (0.91 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
MAR 29...	1000	810	7.9	12.0	10	.0	68	0	17

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)
MAR 29...	6.2	170	84	9.0	1.5	470	0	385	9.5

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	PHENOLS (UG/L)
MAR 29...	26	33	2.0	1200	160	60	10	0

JEFFERSON COUNTY--Continued

401007080522400. Local number J11 W8-2.
LOCATION.--Lat 40°10'07", long 80°52'24", Hydrologic Unit 05030101, near Harrisville.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 105 ft (32.0 m), cased to 20.43 ft (6.23 m), open end.
DATUM.--Altitude of land-surface datum is 1156.67 ft (352.553 m). Measuring point: Top of casing, 0.57 ft (0.174 m) above land-surface datum.
PERIOD OF RECORD.--July 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 31.45 ft (9.586 m) below land-surface datum, May 19, 1978; lowest, 35.92 ft (10.948 m) below land-surface datum, July 21, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		---	34.34	34.54	33.70	34.80	---	33.82	33.85	33.65	31.63	
10		---	34.03	33.53	34.06	34.48	---	33.79	32.43	34.03	---	
15		---	33.10	33.91	34.44	31.87	---	33.34	32.95	33.33	---	
20		---	33.49	34.06	34.28	32.96	---	31.69	33.15	32.77	---	
25		35.18	33.85	33.81	34.63	32.92	33.06	32.77	33.72	32.40	---	
EOM		35.33	34.34	33.46	34.57	---	33.38	33.26	32.99	31.99	---	
MAX		35.68	34.98	34.62	34.74	34.80	33.38	33.98	33.88	34.22	31.93	

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
MAR									
28...	1530	590	7.6	12.0	10	.0	230	0	55

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)
MAR									
28...	22	32	23	.9	2.1	310	0	254	12

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	PHENOLS (UG/L)
MAR								
28...	52	9.3	.2	1900	40	320	0	23

JEFFERSON COUNTY--Continued

401010080521800. Local number, J11 W3-1.
LOCATION.--Lat 40°10'10", long 80°52'18", Hydrologic Unit 05030101, near Harrisville.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 38 ft (11.6 m), cased to 18.6 ft (5.7 m), open end.
DATUM.--Altitude of land-surface datum is 1235.18 ft (376.483 m). Measuring point: Top of casing, 2.4 ft (0.73 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
MAR 29...	1120	535	6.7	12.0	10	.7	180	58	49

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)
MAR 29...	15	7.9	8	.3	3.2	154	0	126	49

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	PHENOLS (UG/L)
MAR 29...	118	14	.1	17000	17000	330	330	0

JEFFERSON COUNTY--Continued

401011080521600. Local number, J11 W1-1.
LOCATION.--Lat 40°10'11", long 80°52'16", Hydrologic Unit 05030101, near Harrisville.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 61.5 ft (18.7 m), cased to 18.5 ft (5.7 m), open end.
DATUM.--Altitude of land-surface datum is 1259.50 ft (383.900 m) Measuring point: Top of casing, 2.5 ft 0.76 m) above land-surface datum.
PERIOD OF RECORD.--September 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 38.33 ft (11.683 m) below land-surface datum, Mar. 6, 1978; lowest, 55.54 ft (16.929 m) below land-surface datum, Oct. 23-24, 1976.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	53.63	55.12	51.07	41.15	42.26	38.50	43.46	47.62	46.54		---	50.20
10	53.65	55.20	44.79	45.55	41.34	---	---	48.57	---		51.36	50.93
15	53.72	55.18	44.17	43.59	40.58	48.24	---	48.23	---		46.66	51.40
20	53.84	54.75	45.46	41.72	39.83	---	---	---	---		47.43	51.87
25	53.96	54.18	44.20	42.00	39.24	---	45.98	---	---		48.20	52.27
EOM	55.01	53.96	42.35	44.24	38.78	41.82	46.22	---	---		49.41	52.47
MAX	55.01	55.21	53.80	46.81	43.69	48.24	46.22	48.70	47.28		51.36	52.47

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
MAR 29...	1500	750	7.3	11.5	10	.0	360	28	99

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)
MAR 29...	27	12	7	.3	1.7	405	0	332	32

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	PHENOLS (UG/L)
MAR 29...	40	11	.1	4600	60	1400	1400	0

JEFFERSON COUNTY--Continued

401011080521601. Local number, J11 W2-2.
LOCATION.--Lat 40°10'11", long 80°52'16", Hydrologic Unit 05030101, near Harrisville.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 211 ft (64.3 m), cased to 65 ft (19.8 m), open end.
DATUM.--Altitude of land-surface datum is 1259.41 ft (383.868 m). Measuring point: Top of casing, 2.5 ft (0.76 m) above land-surface datum.
PERIOD OF RECORD.--September 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 78.04 ft (23.787 m) below land-surface datum, Apr. 4, 1977; lowest, 87.77 ft (26.752 m) below land-surface datum, Sept. 29-30, 1977.
REVISIONS.--Revised water-level data for the water year 1977, superseding those published in the report for 1977, are given herein.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	85.05	---	85.93	85.39	---	82.66	---	83.90	84.47	84.87	84.25	84.87
10	85.07	---	85.73	85.54	---	82.64	---	83.22	84.55	84.83	84.42	84.93
15	85.07	84.56	85.14	85.67	---	81.64	82.71	83.39	84.64	84.77	84.55	84.99
20	---	84.66	84.93	84.89	84.80	80.18	83.14	83.72	84.71	84.78	84.56	85.01
25	---	84.80	85.00	84.96	84.27	81.56	83.53	84.02	84.77	84.40	84.65	85.04
EOM	---	84.89	85.19	---	83.27	82.47	83.79	84.27	84.84	84.11	84.76	85.07
MAX	85.14	84.89	85.94	85.75	85.03	83.09	83.79	84.27	84.84	84.87	84.76	85.07

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	85.09	85.19	84.16	83.40	82.92	84.27	82.15	83.49	83.42	83.06	81.31	84.33
10	85.09	85.20	82.37	82.79	83.28	84.40	81.19	83.72	81.34	83.44	84.32	84.50
15	85.07	85.16	80.96	82.72	83.62	83.28	82.73	83.74	82.51	83.36	83.54	84.61
20	85.08	85.01	81.65	83.03	83.86	81.89	83.00	79.25	82.94	82.58	83.46	84.69
25	85.11	84.78	82.50	83.30	84.04	81.41	82.89	81.60	83.34	82.13	83.77	84.75
EOM	85.15	84.72	83.03	82.60	84.13	80.83	83.14	82.90	82.81	81.64	84.13	84.83
MAX	85.15	85.20	84.71	83.52	84.13	84.40	83.14	83.80	83.58	83.69	84.32	84.83

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
MAR 29...	1400	825	7.2	13.0	10	.0	270	0	68

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)
MAR 29...	25	85	40	2.2	2.7	427	0	350	43

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	PHENOLS (UG/L)
MAR 29...	85	25	.2	4300	10	160	0	5

JEFFERSON COUNTY--Continued

401119080480700. Local number, J08 W5-1.
LOCATION.--Lat 40°11'19", long 80°48'07", Hydrologic Unit 05030101, near Mt. Pleasant.
AQUIFER.--Limestones and shales of Upper Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 125 ft (38.1 m) cased to 19.7 ft (6.0 m), open end.
DATUM.--Altitude of land-surface datum is 1100 ft (335 m), from topographic map. Measuring point: Top of casing, 1.3 ft (0.40 m) above land-surface datum.
PERIOD OF RECORD.--June 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 56.95 ft (17.358 m) below land-surface datum, May 19, 1978; lowest, 59.17 ft (18.035 m) below land-surface datum, September 29-30, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	59.10	59.14	59.01	58.83			---	58.68	58.72	58.92	59.10	59.13
10	59.10	59.14	58.73	58.19			---	---	57.97	58.96	59.11	59.14
15	59.11	59.14	58.19	58.48			---	58.30	58.47	58.99	59.03	59.14
20	59.12	59.11	58.51	58.58			---	57.26	58.71	59.03	59.06	59.15
25	59.12	59.10	58.58	58.74			58.27	58.01	58.86	59.05	---	59.15
EOM	59.14	59.09	58.77	---			58.47	58.42	58.85	59.08	59.11	59.17
MAX	59.14	59.14	59.08	58.84			58.47	58.75	58.87	59.08	59.11	59.17

MUSKINGUM COUNTY

394841081463200. Local number, M09 W10-3.
LOCATION.--Lat 39°48'41", long 81°46'32", Hydrologic Unit 05040004, near Chandlersville.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 190 ft (57.9 m), cased to 41 ft (12.5 m), open end. After Sept. 29, 1976, slotted casing to bottom of well.
DATUM.--Altitude of land-surface datum is 941.51 ft (286.972 m). Measuring point: Top of casing, 0.98 ft (0.30 m) above land-surface datum. Prior to September 29, 1976, top of casing 2.8 ft (0.84 m) above land-surface datum.
REMARKS.--Well redrilled September 29, 1976 because well collapsed.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT
DEC												
20...	1030	1420	8.8	11.5	70	.0	5	0	1.3	.4	330	99
MAR												
30...	1200	850	9.1	13.0	400	.2	11	0	1.9	1.5	180	97
JUL												
06...	0945	920	8.9	13.0	120	.3	8	0	1.4	1.0	210	98

DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)
DEC												
20...	65	1.3	524	51	515	1.6	34	130	4.6	.02	.07	440
MAR												
30...	24	1.7	357	45	368	.6	--	23	1.7	--	--	--
JUL												
06...	33	1.4	412	40	405	1.0	49	39	2.7	--	--	--

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ANTIMONY, TOTAL (UG/L AS SB)	ANTIMONY, DISSOLVED (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)
DEC											
20...	--	0	--	1	--	0	--	0	--	30	0
MAR											
30...	110	--	1	--	1	--	0	--	1	--	1
JUL											
06...	290	--	--	--	1	--	0	--	0	--	0

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)
DEC											
20...	9	--	5600	--	7	--	30	10	<.5	<.5	3
MAR											
30...	--	3	12000	430	--	5	60	10	--	<.5	--
JUL											
06...	--	9	16000	1900	--	0	70	10	--	.5	--

DATE	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
DEC											
20...	--	0	--	0	0	70	70	30	--	.00	10
MAR											
30...	1	--	0	--	0	--	70	--	10	.00	0
JUL											
06...	4	--	0	--	0	--	100	--	10	.00	11

394845081462600. Local number. M09 W5-2.
LOCATION.--Lat 39°48'45", long 81°46'26", Hydrologic Unit 05040004, near Chandlersville.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 49 ft (14.9 m), cased to 17.3 ft (5.3 m), open end.
DATUM.--Altitude of land-surface datum is 973.03 ft (296.580 m). Measuring point: Top of casing, 3.7 ft (1.13 m) above land-surface datum.
PERIOD OF RECORD.--June 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.15 ft (4.313 m) below land-surface datum, Jan. 26, 1978; lowest, 18.32 ft (5.584 m) below land-surface datum, Sept. 4, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.20	15.69	14.90	14.88	14.58	15.33	15.12	15.34	15.41	15.42	---	18.29
10	14.93	15.15	14.99	14.66	14.69	15.18	14.94	15.24	15.34	---	---	17.04
15	14.96	15.21	14.51	14.65	14.95	14.81	15.39	14.82	15.26	---	---	16.82
20	15.30	15.48	14.50	14.54	14.96	14.80	15.22	14.92	15.29	---	---	16.87
25	15.22	15.31	14.53	14.22	15.14	14.72	15.15	15.17	15.36	---	17.30	---
EOM	15.38	15.40	14.75	14.52	15.19	14.94	15.18	15.48	15.34	---	18.23	15.91
MAX	15.47	15.71	15.09	14.93	15.25	15.38	15.43	15.49	15.63	15.42	18.23	18.32

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT
DEC 20...	1130	860	8.0	10.5	35	.0	24	0	6.1	2.0	230	95
MAR 30...	1345	750	8.1	12.5	40	.0	21	0	5.2	1.8	190	95
JUL 06...	1225	830	8.1	15.5	1	.0	27	0	6.7	2.4	200	94

DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)
DEC 20...	21	1.7	547	0	449	8.8	37	4.3	1.9	.01	.03	400
MAR 30...	18	1.4	512	0	420	6.5	--	4.5	1.7	--	--	--
JUL 06...	17	1.6	524	0	430	6.7	38	4.2	1.7	--	--	--

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ANTIMONY, TOTAL (UG/L AS SB)	ANTIMONY, DISSOLVED (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)
DEC 20...	--	0	--	4	--	200	--	0	--	20	0
MAR 30...	40	--	0	--	1	--	200	--	1	--	0
JUL 06...	30	--	--	--	1	--	200	--	3	--	0

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)
DEC 20...	15	--	6100	940	25	--	50	20	<.5	<.5	5
MAR 30...	--	1	6400	20	--	1	30	10	--	<.5	--
JUL 06...	--	0	15000	380	--	16	50	20	--	.5	--

394845081462600. Local number. M09 W5-2.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
DEC											
20...	--	0	--	0	0	360	340	50	50	.00	13
MAR											
30...	3	--	0	--	0	--	330	--	10	.00	0
JUL											
06...	3	--	0	--	0	--	350	--	0	.00	6

The following table lists the lakes at which chemical and physical characteristics and biological indices were obtained during water year 1978. These lakes were sampled to evaluate current conditions and existing or potential problems, determine chemical and physical characteristics of inflow from major tributaries, and provide basic information for determining the necessity for more intensive studies where problems exist. The results of these studies may be obtained by writing to the District Chief, WRD, 975 West Third Avenue, Columbus, Ohio, 43212. The complete study will be available in a separate report to be published in the near future.

395548082274300	Buckeye Lake	Perry County
393559083575400	Caesar Creek Reservoir	Greene County
404428082214600	Charles Mill Lake	Ashland County
392014082010500	Dow Lake	Athens County
390531081460500	Forked Run Lake	Meigs County
393735082530900	Harqus Creek Lake	Pickaway County
403815080450100	Highlandtown Lake	Columbiana County
385331082360500	Lake Jackson	Jackson County
391914082211800	Lake Hope	Vinton County
385539082211200	Tycoon Lake	Gallia County
392041081395400	Veto Lake	Washington County
391537084295000	West Fork Millcreek Lake	Hamilton County

APPENDIX

Listing of water-quality parameter codes (see NOTICE page 2).

Parameter Codes	New Terminology -- First line Old Terminology -- Second line
39332	ALDRIN, SUSPENDED TOTAL (UG/L)
39332	ALDRIN, SUSPENDED (UG/L)
01505	ALPHA, SUSPENDED TOTAL (PCI/L)
01505	ALPHA, SUSPENDED (PCI/L)
01506	ALPHA, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
01506	ALPHA, SUSPENDED, COUNTING ERROR (PCI/L)
01105	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)
01105	ALUMINUM, TOTAL (UG/L AS AL)
01107	ALUMINUM, SUSPENDED RECOVERABLE (UG/L AS AL)
01107	ALUMINUM, SUSPENDED (UG/L AS AL)
01108	ALUMINUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS AL)
01108	ALUMINUM, TOTAL IN BOTTOM MATERIAL (UG/G AS AL)
01096	ANTIMONY, SUSPENDED TOTAL (UG/L AS SB)
01096	ANTIMONY, SUSPENDED (UG/L AS SB)
39502	AROCLOR, SUSPENDED TOTAL, 1248 PCB SERIES (UG/L)
39502	AROCLOR, SUSPENDED, 1248 PCB SERIES (UG/L)
39506	AROCLOR, SUSPENDED TOTAL, 1254 PCB SERIES (UG/L)
39506	AROCLOR, SUSPENDED, 1254 PCB SERIES (UG/L)
39510	AROCLOR, SUSPENDED TOTAL, 1260 PCB SERIES (UG/L)
39510	AROCLOR, SUSPENDED, 1260 PCB SERIES (UG/L)
01001	ARSENIC, SUSPENDED TOTAL (UG/L AS AS)
01001	ARSENIC, SUSPENDED (UG/L AS AS)
01006	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)
01006	BARIUM, SUSPENDED (UG/L AS BA)
01007	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)
01007	BARIUM, TOTAL (UG/L AS BA)
01008	BARIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS BA)
01008	BARIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS BA)
01011	BERYLLIUM, SUSPENDED RECOVERABLE (UG/L AS BE)
01011	BERYLLIUM, SUSPENDED (UG/L AS BE)
01012	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)
01012	BERYLLIUM, TOTAL (UG/L AS BE)
01013	BERYLLIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS BE)
01013	BERYLLIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS BE)
03505	BETA, SUSPENDED TOTAL (PCI/L)
03505	BETA, SUSPENDED (PCI/L)
03506	BETA, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
03506	BETA, SUSPENDED, COUNTING ERROR (PCI/L)
01016	BISMUTH, SUSPENDED TOTAL (UG/L AS BI)
01016	BISMUTH, SUSPENDED (UG/L AS BI)
01021	BORON, SUSPENDED RECOVERABLE (UG/L AS B)
01021	BORON, SUSPENDED (UG/L AS B)
01022	BORON, TOTAL RECOVERABLE (UG/L AS B)
01022	BORON, TOTAL (UG/L AS B)
01023	BORON, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS B)
01023	BORON, TOTAL IN BOTTOM MATERIAL (UG/G AS B)

APPENDIX--Continued

Listing of water-quality parameter codes (see NOTICE page 2).

Parameter Codes	New Terminology -- First line Old Terminology -- Second line
01026	CADMIUM, SUSPENDED RECOVERABLE (UG/L AS CD)
01026	CADMIUM, SUSPENDED (UG/L AS CD)
01027	CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)
01027	CADMIUM, TOTAL (UG/L AS CD)
01028	CADMIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CD)
01028	CADMIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS CD)
00916	CALCIUM, TOTAL RECOVERABLE (MG/L AS CA)
00916	CALCIUM, TOTAL (MG/L AS CA)
07052	CALCIUM 45, SUSPENDED TOTAL (PCI/L)
07052	CALCIUM 45, SUSPENDED (PCI/L)
07053	CALCIUM 45, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07053	CALCIUM 45, SUSPENDED, COUNTING ERROR (PCI/L)
00683	CARBON, ORGANIC, SUSPENDED TOTAL (MG/L AS C)
00683	CARBON, ORGANIC, SUSPENDED (MG/L AS C)
00688	CARBON, INORGANIC, SUSPENDED TOTAL (MG/L AS C)
00688	CARBON, INORGANIC, SUSPENDED (MG/L AS C)
00689	CARBON, ORGANIC, SUSPENDED TOTAL (MG/L AS C)
00689	CARBON, ORGANIC, SUSPENDED (MG/L AS C)
00694	CARBON, INORGANIC PLUS ORGANIC, SUSPENDED TOTAL (MG/L AS C)
00694	CARBON, INORGANIC PLUS ORGANIC, SUSPENDED (MG/L AS C)
01116	CESIUM, SUSPENDED TOTAL (UG/L AS CS)
01116	CESIUM, SUSPENDED (UG/L AS CS)
28404	CESIUM 137, SUSPENDED TOTAL (PCI/L)
28404	CESIUM 137, SUSPENDED (PCI/L)
28405	CESIUM 137,SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
28405	CESIUM 137,SUSPENDED, COUNTING ERROR (PCI/L)
28412	CESIUM 134, SUSPENDED TOTAL (PCI/L)
28412	CESIUM 134, SUSPENDED (PCI/L)
28413	CESIUM 134, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
28413	CESIUM 134, SUSPENDED, COUNTING ERROR (PCI/L)
39353	CHLORDANE, SUSPENDED TOTAL (UG/L)
39353	CHLORDANE, SUSPENDED (UG/L)
01029	CHROMIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CR)
01029	CHROMIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS CR)
01031	CHROMIUM, SUSPENDED RECOVERABLE (UG/L AS CR)
01031	CHROMIUM, SUSPENDED (UG/L AS CR)
01034	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
01034	CHROMIUM, TOTAL (UG/L AS CR)
01036	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)
01036	COBALT, SUSPENDED (UG/L AS CO)
01037	COBALT, TOTAL RECOVERABLE (UG/L AS CO)
01037	COBALT, TOTAL (UG/L AS CO)
01038	COBALT, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CO)
01038	COBALT, TOTAL IN BOTTOM MATERIAL (UG/G AS CO)
01041	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)
01041	COPPER, SUSPENDED (UG/L AS CU)

APPENDIX--Continued

Listing of water-quality parameter codes (see NOTICE page 2).

Parameter Codes	New Terminology -- First line Old Terminology -- Second line
01042	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
01042	COPPER, TOTAL (UG/L AS CU)
01043	COPPER, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CU)
01043	COPPER, TOTAL IN BOTTOM MATERIAL (UG/G AS CU)
39302	DDD, SUSPENDED TOTAL (UG/L)
39302	DDD, SUSPENDED (UG/L)
39307	DDE, SUSPENDED TOTAL (UG/L)
39307	DDE, SUSPENDED (UG/L)
39372	DDT, SUSPENDED TOTAL (UG/L)
39372	DDT, SUSPENDED (UG/L)
39573	DIAZINON, SUSPENDED TOTAL (UG/L)
39573	DIAZINON, SUSPENDED (UG/L)
39382	DIELDRIN, SUSPENDED TOTAL (UG/L)
39382	DIELDRIN, SUSPENDED (UG/L)
39392	ENDRIN, SUSPENDED TOTAL (UG/L)
39392	ENDRIN, SUSPENDED (UG/L)
01121	GALLIUM, SUSPENDED TOTAL (UG/L AS GA)
01121	GALLIUM, SUSPENDED (UG/L AS GA)
01126	GERMANIUM, SUSPENDED TOTAL (UG/L AS GE)
01126	GERMANIUM, SUSPENDED (UG/L AS GE)
01516	GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL (PCI/L AS U NATURAL)
01516	GROSS ALPHA RADIOACTIVITY, SUSPENDED (PCI/L AS U NATURAL)
01517	GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL (PCI/G AS U NATURAL)
01517	GROSS ALPHA RADIOACTIVITY, SUSPENDED (PCI/G AS U NATURAL)
01518	GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL (UG/G AS U NATURAL)
01518	GROSS ALPHA RADIOACTIVITY, SUSPENDED (UG/G AS U NATURAL)
80040	GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL (UG/L AS U NATURAL)
80040	GROSS ALPHA RADIOACTIVITY, SUSPENDED (UG/L AS U NATURAL)
80060	GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL (PCI/L AS SR/YT-90)
80060	GROSS BETA RADIOACTIVITY, SUSPENDED (PCI/L AS SR/YT-90)
03516	GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL (PCI/L AS CS-137)
03516	GROSS BETA RADIOACTIVITY, SUSPENDED (PCI/L AS CS-137)
03517	GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL (PCI/G AS SR/YT-90)
03517	GROSS BETA RADIOACTIVITY, SUSPENDED (PCI/G AS SR/YT-90)
03518	GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL (PCI/G AS CS-137)
03518	GROSS BETA RADIOACTIVITY, SUSPENDED (PCI/G AS CS-137)

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Listing of water-quality parameter codes (see NOTICE page 2).

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39412	HEPTACHLOR, SUSPENDED TOTAL (UG/L)
39412	HEPTACHLOR, SUSPENDED (UG/L)
39422	HEPTACHLOR EPOXIDE, SUSPENDED TOTAL (UG/L)
39422	HEPTACHLOR EPOXIDE, SUSPENDED (UG/L)
01044	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)
01044	IRON, SUSPENDED (UG/L AS FE)
01045	IRON, TOTAL RECOVERABLE (UG/L AS FE)
01045	IRON, TOTAL (UG/L AS FE)
01170	IRON, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS FE)
01170	IRON, TOTAL IN BOTTOM MATERIAL (UG/G AS FE)
07062	IRON 59, SUSPENDED TOTAL (PCI/L)
07062	IRON 59, SUSPENDED (PCI/L)
07063	IRON 59, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07063	IRON 59, SUSPENDED, COUNTING ERROR (PCI/L)
39432	ISODRIN, SUSPENDED TOTAL (UG/L)
39432	ISODRIN, SUSPENDED (UG/L)
01050	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)
01050	LEAD, SUSPENDED (UG/L AS PB)
01051	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
01051	LEAD, TOTAL (UG/L AS PB)
01052	LEAD, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS PB)
01052	LEAD, TOTAL IN BOTTOM MATERIAL (UG/G AS PB)
39342	LINDANE, SUSPENDED TOTAL (UG/L)
39342	LINDANE, SUSPENDED (UG/L)
01131	LITHIUM, SUSPENDED RECOVERABLE (UG/L AS LI)
01131	LITHIUM, SUSPENDED (UG/L AS LI)
01132	LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)
01132	LITHIUM, TOTAL (UG/L AS LI)
00926	MAGNESIUM, SUSPENDED RECOVERABLE (MG/L AS MG)
00926	MAGNESIUM, SUSPENDED (MG/L AS MG)
00927	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)
00927	MAGNESIUM, TOTAL (MG/L AS MG)
39533	MALATHION, SUSPENDED TOTAL (UG/L)
39533	MALATHION, SUSPENDED (UG/L)
01053	MANGANESE, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS MN)
01053	MANGANESE, TOTAL IN BOTTOM MATERIAL (UG/G AS MN)
01054	MANGANESE, SUSPENDED RECOVERABLE (UG/L AS MN)
01054	MANGANESE, SUSPENDED (UG/L AS MN)
01055	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
01055	MANGANESE, TOTAL (UG/L AS MN)
71895	MERCURY, SUSPENDED RECOVERABLE (UG/L AS HG)
71895	MERCURY, SUSPENDED (UG/L AS HG)
71900	MERCURY, TOTAL RECOVERABLE (UG/L AS HG)
71900	MERCURY, TOTAL (UG/L AS HG)
71921	MERCURY, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS HG)
71921	MERCURY, TOTAL IN BOTTOM MATERIAL (UG/G AS HG)

APPENDIX--Continued

Listing of water-quality parameter codes (see NOTICE PAGE 2).

Parameter Codes	New Terminology -- First line Old Terminology -- Second line
39603	METHYL PARATHION, SUSPENDED TOTAL (UG/L)
39603	METHYL PARATHION, SUSPENDED (UG/L)
39757	MIREX, SUSPENDED TOTAL (UG/L)
39757	MIREX, SUSPENDED (UG/L)
01061	MOLYBDENUM, SUSPENDED RECOVERABLE (UG/L AS MO)
01061	MOLYBDENUM, SUSPENDED (UG/L AS MO)
01062	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)
01062	MOLYBDENUM, TOTAL (UG/L AS MO)
01063	MOLYBDENUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS MO)
01063	MOLYBDENUM, TOTAL IN BOTTOM MATERIAL (UG/G AS MO)
01066	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)
01066	NICKEL, SUSPENDED (UG/L AS NI)
01067	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)
01067	NICKEL, TOTAL (UG/L AS NI)
01068	NICKEL, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS NI)
01068	NICKEL, TOTAL IN BOTTOM MATERIAL (UG/G AS NI)
00623	NITROGEN, AMMONIA PLUS ORGANIC, DISSOLVED (MG/L AS N)
00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)
00624	NITROGEN, AMMONIA PLUS ORGANIC, SUSPENDED TOTAL (MG/L AS N)
00624	NITROGEN, KJELDAHL, SUSPENDED (MG/L AS N)
00625	NITROGEN, AMMONIA PLUS ORGANIC, TOTAL (MG/L AS N)
00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)
00626	NITROGEN, AMMONIA PLUS ORGANIC, TOTAL IN BOTTOM MATERIAL, DRY WT (MG/KG AS N)
00626	NITROGEN, KJELDAHL, TOTAL IN BOTTOM MATERIAL, DRY WT (MG/KG AS N)
39543	PARATHION, SUSPENDED TOTAL (UG/L)
39543	PARATHION, SUSPENDED (UG/L)
39518	PCB, SUSPENDED TOTAL (UG/L)
39518	PCB, SUSPENDED (UG/L)
09505	RADIUM 226, SUSPENDED TOTAL (PCI/L)
09505	RADIUM 226, SUSPENDED (PCI/L)
07082	RHODAMINE WT, SUSPENDED TOTAL (UG/L)
07082	RHODAMINE WT, SUSPENDED (UG/L)
01136	RUBIDIUM, SUSPENDED TOTAL (UG/L AS RB)
01136	RUBIDIUM, SUSPENDED (UG/L AS RB)
29633	SCANDIUM 46, SUSPENDED TOTAL (PCI/L)
29633	SCANDIUM 46, SUSPENDED (PCI/L)
29634	SCANDIUM 46, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
29634	SCANDIUM 46, SUSPENDED, COUNTING ERROR (PCI/L)
01146	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)
01146	SELENIUM, SUSPENDED (UG/L AS SE)
07102	SELENIUM 75, SUSPENDED TOTAL (PCI/L)
07102	SELENIUM 75, SUSPENDED (PCI/L)
07103	SELENIUM 75, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07103	SELENIUM 75, SUSPENDED, COUNTING ERROR (PCI/L)
01076	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)
01076	SILVER, SUSPENDED (UG/L AS AG)

APPENDIX--Continued

Listing of water-quality parameter codes (see NOTICE page 2).

Parameter Codes	New Terminology -- First line Old Terminology -- Second line
01077	SILVER, TOTAL RECOVERABLE (UG/L AS AG)
01077	SILVER, TOTAL (UG/L AS AG)
01078	SILVER, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS AG)
01078	SILVER, TOTAL IN BOTTOM MATERIAL (UG/G AS AG)
07122	SILVER 110, SUSPENDED TOTAL (PCI/L)
07122	SILVER 110, SUSPENDED (PCI/L)
07123	SILVER 110, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07123	SILVER 110, SUSPENDED, COUNTING ERROR (PCI/L)
39703	SILVER, SUSPENDED TOTAL (UG/L)
39703	SILVER, SUSPENDED (UG/L)
70299	SOLIDS, RESIDUE AT 110 DEG. C, SUSPENDED TOTAL (MG/L)
70299	SOLIDS, RESIDUE AT 110 DEG. C, SUSPENDED (MG/L)
01081	STRONTIUM, SUSPENDED RECOVERABLE (UG/L AS SR)
01081	STRONTIUM, SUSPENDED (UG/L AS SR)
01082	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)
01082	STRONTIUM, TOTAL (UG/L AS SR)
01083	STRONTIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS SR)
01083	STRONTIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS SR)
13505	STRONTIUM 90, SUSPENDED TOTAL (PCI/L)
13505	STRONTIUM 90, SUSPENDED (PCI/L)
13506	STRONTIUM 90, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
13506	STRONTIUM 90, SUSPENDED, COUNTING ERROR (PCI/L)
07142	SULFUR 35, SUSPENDED TOTAL (PCI/L)
07142	SULFUR 35, SUSPENDED (PCI/L)
07143	SULFUR 35, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07143	SULFUR 35, SUSPENDED, COUNTING ERROR (PCI/L)
01101	TIN, SUSPENDED RECOVERABLE (UG/L AS SN)
01101	TIN, SUSPENDED (UG/L AS SN)
01102	TIN, TOTAL RECOVERABLE (UG/L AS SN)
01102	TIN, TOTAL (UG/L AS SN)
01151	TITANIUM, SUSPENDED TOTAL (UG/L AS TI)
01151	TITANIUM, SUSPENDED (UG/L AS TI)
39402	TOXAPHENE, SUSPENDED TOTAL (UG/L)
39402	TOXAPHENE, SUSPENDED (UG/L)
07010	TRITIUM, SUSPENDED TOTAL (PCI/L)
07010	TRITIUM, SUSPENDED (PCI/L)
07011	TRITIUM, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07011	TRITIUM, SUSPENDED, COUNTING ERROR (PCI/L)
07014	TRITIUM, SUSPENDED TOTAL, COUNTING ERROR (TRITIUM UNITS)
07014	TRITIUM, SUSPENDED, COUNTING ERROR (TRITIUM UNITS)
07016	TRITIUM, SUSPENDED TOTAL (TRITIUM UNITS)
07016	TRITIUM, SUSPENDED (TRITIUM UNITS)
22705	URANIUM, NATURAL, SUSPENDED TOTAL (UG/L AS U NATURAL)
22705	URANIUM, NATURAL, SUSPENDED (UG/L AS U NATURAL)
01086	VANADIUM, SUSPENDED TOTAL (UG/L AS V)
01086	VANADIUM, SUSPENDED (UG/L AS V)

APPENDIX--Continued

Listing of water-quality parameter codes (see NOTICE page 2).

Parameter Codes	New Terminology -- First line Old Terminology -- Second line
01091	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)
01091	ZINC, SUSPENDED (UG/L AS ZN)
01092	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
01092	ZINC, TOTAL (UG/L AS ZN)
01093	ZINC, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS ZN)
01093	ZINC, TOTAL IN BOTTOM MATERIAL (UG/G AS ZN)
01161	ZIRCONIUM, SUSPENDED TOTAL (UG/L AS ZR)
01161	ZIRCONIUM, SUSPENDED (UG/L AS ZR)
39733	2,4-D, SUSPENDED TOTAL (UG/L)
39733	2,4-D, SUSPENDED (UG/L)
39743	2,4,5-T, SUSPENDED TOTAL (UG/L)
39743	2,4,5-T, SUSPENDED (UG/L)

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FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons